

AGENTS FOR THE SALE OF GOVERNMENT PUBLICATIONS.

IN ENGLAND.

Mr. E. A. Arnold, 41 & 48, Maddox Street, Bond Street, London, W.

Mesers. Constable & Co., 16, James Street, Haymarket, London, W.

Messrs. Kegan Paul, Trench, Trubner & Co., 43, Gerrard Street, Soho, London, W.

Mr. Bernard Quariteh, 15, Piccadilly, London.

Messrs. P. S. King and Son, 3 & 4, Great Smith Street, Westminster. Messrs. H. S. King & Co., 65, Cornhill, and 9 Pall Mall, London.

Messrs. Grindlay & Co., 54, Parliament Street, London, S.W.

Mr. B. H. Blackwell, 50 & 51, Broad Street, Oxford.

Messrs. Deighton Bell & Co., Cambridge.

ON THE CONTINENT.

Messrs. R. Friedlander & Sohn, Berlin, W. N. Carlstrasse, 11.

Mr. Otto Harrasowitz. Leipzig.

Mr. Ernest Leroux, 28, Rue Bonaparte, Paris. Mr. Martinus Nijhoff, Hague, Holland. Mr. Rudolf Haupt, Halle-A-S., Germany.

IN INDIA.

Messrs. Thacker, Spin's & Co., Calcutta & Simla.

Messrs. R. Cambray & Co., Calcutta.

Messrs. B. Lahiri & Co., Calcutta.

Messrs. B. Lahiri & Co., Madras.

Messrs. Higginbotham & Co., Madras.

Messrs. V. Kalyanarama Iyer & Co., Madras.

Messrs. G. A. Natesan & Co., Madras.

Messrs. S. Murthy & Co., Madras.

Messrs. Thompson & Co., Madras.

Messrs. Temple & Co., Madras.

Messrs. Combridge & Co., Madras.

Messrs. Thacker & Co., Limited, Bombay. Messrs. A. J. Combridge & Co., Bombay. Messrs. D. B. Taraporevala, Sons & Co., Bombay. Mrs. Radhabai Atmaram Sagoon, Bombay.

Mr. Sundan Atmaram asgoon, Sonday. Mr. Sundar Pandurang, Bombay. Messrs. Gopal Naryan & Co., Bombay. Superintendent, American Baptist Mission

Press, Rangoon.
Rai Sahib M. Gulab Singh & Sons, Mufid-iAm Press, Lahore.

Mr. N. B. Mathur, Superintendent, Nazair Kanun Hind Press, Allahabad.
Messrs. A. M. & J. Ferguson, Ceylon.

31 -08.

Oz. 001aaa. 9.

BALUCHISTAN DISTRICT GAZETTEER SERIES.

VOLUME I.

ZHOB DISTRICT.



35 ontbay
PRIMED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS, BOMBAY.

1907.

Price, Rs. 3.8.0 or 5 Shillings.



710.3 B198 A - Zh



7354

SL NO. 023588

PREFACE.

THE Zhob District, which borders on Afghánistán, originally comprised five tahsíls, Fort Sandeman, Kila Saifulla, Hindubágh, Músa Khél, and Bori; of which the last two were transferred to the new District of Loralai in 1903. The present volume, therefore, deals mainly with the remaining three tahsils, but occasional reference has had to be made to the other tahsils also.

The material for this volume was collected and arranged by Rai Sáhib Jamiat Rai, assisted by the Gazetteer staff. After revision by me, the draft was finally examined and passed by Major A. McConaghey, Political Agent, Zhob, whose knowledge of the District is extensive. Owing, however, to the limited time which remained for the completion of the work, both revision and examination had to be somewhat hurriedly carried out.

In many instances where the conditions of both Districts were exactly similar, a good deal of the material has been reproduced, with the necessary local adaptations, from Mr. Hughes-Buller's Gazetteer of the Quetta-Pishin District and use has also been made of his report on the Census of Baluchistán, 1901. Much information has been derived from the Administration Reports of the District from 1890-91 written by the various Political Agents who have held charge: from the reports on our dealings with the Jogizai family by Major McMahon, C.S.I., C.I.E., Major Archer, C.I.E., and Major Showers, C.I.E., and from the Settlement Reports of the Kila Saifulla and Hindubágh tahsíls written by Khán Bahádur Mír Shams Sháh and Kázi Abdulla Ján.

A bibliography will be found at the end of this volume giving other works made use of in its compilation. The section on Forests was revised by Bhai Sádhu Singh, Extra Assistant Conservator of Forests in Baluchistán; and the articles on Geology, Coal and Chromite were kindly contributed by Messrs. Vredenburg and Tipper of the Geological Survey of India.

Thanks are due to the local officials for the assistance they have so willingly rendered and especially to Lúla Bhág Mal, Extra Assistant Commissioner, Lower Zhob.

C. F. MINCHIN, MAJOR,
Superintendent, District Gazetteers,
Baluchistan.

QUETTA, December, 1906.

TABLE OF CONTENTS.

ZHOB DISTRICT.

CHAPTER I .- DESCRIPTIVE.

CHIB	MAL ABLECTS	_									FAUE
	Situation and	dimensi	ons	***		•••	•••	•••	***	•••	1
	Origin of name	В		***	•••		•••		•••		ib
	Boundaries	•••	•••	***	•••	•••	•••	•••		***	ib
	Eastern bound	lary	•••	•••	***	•••	•••	•••	•••	***	2
	Southern boun	dary	•••	***	***		•••	***	•••		4
	Western bound	lary	•••	•••	•••		•••	***	•	***	ib
	Configuration	•••	•••	•••	•••	***		•••		•••	5
	Hill ranges	•••	***	. •••	•••	•••	•••		•••	•••	6
	Sulaimán ran	ge	•••	**	***	•••		***		•••	ib
	Takht-i-Sulai	mán	•••	***	***	•••	•••	•••	•••		8
	The Záo defile	•••	•••	***	***	•••	•••		***	491	9
	The Gat defile	•••	•••	•••	***		•••	***		•••	10
	Cháhar Khél l	Dahána	pass	***		***			•••	•••	ib
	Subsidiary rat	nges, Sh	ingha	r	•••		•••		***	•••	ib
	Torghar	•••	•••	•••	144	•••	***	***	•••	***	11
	Toba Kákar ra	nge		***	•••		•••	•••	***	•••	12
	Subsidiary ran	ges, Sp	éragh:	ar	•••	•••		***			ib
	Spinghar			***	100		•••	***	***	•••	18
	Torghar	•••							***		14
	Kand mountai		•••	•••	***	•••	•••			***	ib
	Tabai	•••	***	***	101	***	•••			946	ib
	Tsapar and Sh		•••	144			***	***		140	15
	Sakir		•••	•••		***		•••	•••	•••	ib
	Súrghund and		•••	***	***	***		***	•••		16
	Bivers	•••	•••	:			•••	***	•••	•••	17
	The Zhob river		•••	***	100	***	***	***	•••	•••	ib
	Kundar	•		•••	***	***	•••	***	•••	101	19
	Chukhan or Sr		•••	•••	***	***	•••	***	***	* ***	20
	Rod Fakirsal			***	100	•••	•••	•••			21
	Rod Jogisai (K		•••		•••	•••	***	***	***	***	ib
	Sawara		***	•••	•••	***	•••	***	***	***	22
	Siliáza	•••	•••			•••	•••	***	•••	•••	23
	Khaisára	•••	•••		100	•••	***	***	•••		ib

ii Contents.

												PAGE
	Chúharkh	él Dal	iána str	eam	•••	1	•••	•••	***		•••	23
	Geology	•••	***	•••	***	•••		•••	•••	•••	•••	ib
	Botany			•••	***	***	•••	***			•••	25
	Fauna	•••		•••				***	***	•••	•••	26
Сттм	ате, Тем	יי א פועם	TOP A	NT T	ATNIBAT	r. T						
Onia.		Lauai	овы, в.	MD 11	MINDA	ur						27
	Climate	***	***	•••	•••	•••	***	•••	***	•••	***	
	Seasons	•••	•••	•••	•••	•••	***	•••	•••	***	***	ib ib
	Rainfall	•••	•••	•••	***	***	***	•••	*** .	•••	•••	ib
	Winds	***	•••	•••	•••	***	***	***	•••	•••	•••	28
	Floods	***	•••	•••	100	•••	***	***	•••	•••	***	ib
	Earthqu	ake	•••	•••	•••	***	•••	•••	•••	***	***	10
Hist	ORY-											
	Modern	Histor	у	•••	•••	***	•••	•••	•••	•••	•••	34
	Zhob Ex	pediti	on, 188	1	***	•••	•••	••	•••	•••	•••	86
	Murder	of Sh á	hmár K	hán,	1885	***	***	•••	***	•••	•••	38
	Dost Mu	bamm	ad, 1887	7	***	•••	•••	•••	•••	•••	•••	ib
	Sir Robe	rt San	deman'	s mai	rch to A	pozai,	1888	***	•••	•••	•••	39
	Submiss	ion of	the Ma	ndo I	Zhéls	•••	•••	***	•••	•••		40
	Submiss	ion of	the Zho	b Ká	kars	•••	•••	***	•••	•••	•••	ib
	Occupat	ion of	Zhob, 1	889	•••	***	•••	•••	•••	•••	•••	ib
	Relation	s with	the Jo	gí zai	family	after t	ho occu	pation	of Zho	b	•••	43
	Murder										***	44
	Submise	ion of	Baugul	Khá	n		~	***	•••	•••	•••	45
	Admini	strativ	e arran	geme	nts	***	•••	***	***	•••	***	46
	Importa	nt eve	nts, 189	2	***	***	•••	•••		•••	•••	47
ARC	HÆOLOGY-	_										
	10 1											
	Mounds		•••	•••	***	•••	***	***	101	***	•••	49
	Old fort		•••	•••	100	•••	•••	•••	•••	***	***	ib
	Old Kár		***	•••	•••	•••	***	•••	•••	•••	***	50
	Band-i-l		***	***	•••	•••	•••	***	***	***	***	ib
_	Old coi		***	•••	•••	•••	***	***	•••	***	•••	ib
Pop	ULATION-	-										
	Ethnog	raphic	al histo	ry	***	***	•••	***	***	***	***	51
	Density	and g	rowth	***	***	•	***	***	•••	***	•••	53
	Towns:	and vi	llages	•••	***	***	***	***	•••	•••	•••	54
	Migrati		***	•••	•••	***	***	•••	***	***	•••	ib
	Emigra		•••	•••	•••	•••	***	•••	•••	***	•••	55
	Periodi		-		. 134	•••	***		***	•••	•••	ib
	lmmigr				•••	•••	•••	•••	•••	•••	***	56
	Agestat	istics,	vital st	atisti	cs, infa	nt mor i	tality a	nd infi	rmities		***	57

Contents.

iii

									PAG
Comparative num	ber of the	BOX68	and civ	rii cond	litious	•••		•••	58
Marriage customs	···	•••	•••	•••	•••	***	•••	•••	ŝ
Marriage ceremon	ies	•••	***	***	•••	•••		•••	59
Bride-price .		•••	•••	•••	•••	•••	•••	•••	61
System of exchan	ge	***	•••	•••	•••	•••	•••	***	62
Ar System of man	riage	•••	•••	•••	•••	•••	•••	•••	il
Marriage expense	s and gifts	•••	***	***	***	•••	***	•••	68
Divorce		•••	•••	•••	•••	***	•••	•••	i
Penalties for adul	tery;	***	•••	•••	•••	***		•••	il
The status of won	nen and ri	ghts to	proper	t y	•••	•••	•••	***	64
Inheritance .		•••	•••	***	•••	***	•••	•••	68
Language	•• •••	***	•••	***	•••	•••	•••	***	66
Races, tribes and	castes	•••	•••	•••	***	•••	***	***	il
Tribal constitutio	n		•••	•••	***			***	67
Kákars		•••	•••	•••	***		•••		š
The Sanzar Khél	cl a n	***	***	•••	***		•••	•••	68
Dumars		•••	•••	•••	•••	•••	•••		71
The Sanatia clan	•••	•••	***	•••	•••	•••	•••	***	il
The Sargara clan		•••	***	•••	•••	•••		•••	il
Physical character		107	•••	•••	•••	***	***	•••	72
Shiráni tribe		•••	•••		***	•••	•••	•••	73
Character and app	pearance	***	***	***	•••	***	•••	***	74
The Panri tribe	-	•••		•••	•••	•••	•••	•••	75
The Lawána clan	***	•••				•••	***	•••	76
The Mando Khél	olan	•••		***	•••	•••	•••		ib
The Sáfi tribe	. :••	•••	***	•••	•••	***	***	100	77
The Saiads		•••	•••		•••	•••	•••	•••	ih
Ghilzais			•••		•••	•••	•••	•••	78
Kharot	-1 ***	***		•••	•••	•••	•••		79
Násars		•••	•••	***	***	•••		***	ib
The Bulaimán Khe	sı	•••	•••		•••	•••	***		80
The Wazirs		•••	•••	***	•••	•••	•••		84
Religion		•••	•••	•••	•••	•••		***	87
Islám		***	•••	•••	•••	•••		•••	ib
Hindus and Hind	nism	•••	•••		•••	***	100		89
Arya Samáj		***	***	•••		•••	•••	•••	ib
Occupation		•••		•••			•••	•••	ib
Social life		•••	•••	•••	***	***	•••	•••	90
Custom of hospits		•••	•••	•••	***	•••	100		91
Co-operation amo	•			•••	•••	•••	•••	•••	ib
Food	_	***	•••	•••	•••	•••	•••	•••	92
Fanit and manetals									0.4

												PAGE
	Utensils	•••	***	•••	•••	***	**	•••	•••	•••	***	94
	Dress	•••	•••	***	•••	•••	•••	•••	•••	•••	•••	ib
	Hair	•••		•••	•••	•••	***	•••	***	***	•••	96
	Ornament	.8	***	•••	•••	•••	•••	•••	***	•••		ib
	Dwellings		•••	•••	•••	•••	•••	•••	***	•••	•••	ib
	Disposal o	f the	dead	•••	•••	•••	***	•••	•••	***	•••	98
	Amuseme	nts ar	d festi	vals	***	***		***	•••	•••	***	ib
	Shrines	•••			***	***		•••	***	***	• • •	99
	Names an	d title	S,	•••	***	•••	•••	•••	***		***	104
	Rules of b	onour		•••	•••	•••	•••	***		•••	***	106
	System of	repri	sal s			•••	•••	•••	•••	***	***	107
	Blood con	apens	ation	•••	•••	***	•••	***	•••	***	•••	108
	Afghán re	-		•••	•••	•••	100	***	***	***	•••	ib
	- ·	Ü					 -					
				CHAI	PTER	11.—E	CONO	MIC.				
AGR:	OULTURE—	-										
	General c	ondit	ions	•••	•••		•••	***	•••	•••	***	109
	Soils		•••		•••		•••	•••	•••	•••	***	110
	Rainfall s	ra baa	vstem c	f culti	vation	in rela			•••		***	111
	Irrigated	•								irrigati		113
	Populatio		-					•••	•••		•••	113
	Sowing a	-		-	,	•••	•••	•••	100	•••		ib
	Staple for				•••	***	•••	•••	***	•••	***	111
	Dry crop	_		***	•••	•••	•••	•••	***		•••	116
	Barley	•••		***	***	***	***	***	•••	•••	***	117
	Maize	•••	•••		•••	•••	•••	•••	•••	•••	***	ib.
	Juári	•••	•••	***	•••		•••		•••	•••		118
	Dry crop			•••		•••		•••	•••		•••	ib
	Millets, A					•••	•••	***	•••	•••	***	ib
	Rice	***	•••	•••	•••	***	•••	•••			•••	119
	Manure,					•••	•••	•••	•••	•••	***	119
	Out-turn						***				•••	120
	Fruit an					•••	•••	•••	***	***	***	122
	Melons						***	•••	•••		•••	123
	Kitchen			***	•••					•••	•••	
	Extension	_				•••	***	•••	***	***	•••	ib
	Agricult						•••	•••	***	***	***	125
	Agricultu		•		***	•••	•••	***	•••	***	144	127
	Agricultu				•••	•••	•••	•••	•••	***	***	ib
	Sales and				•••	***	***	•••	***	•••	•••	129
	Domestic		~ ~		•••	•••	•••	***	•••	•••	***	181
	Camels			•••	***	***	0.70	***	•••	***	***	133
	Cameis	•••	•••	***	***	***	***	***	***	100	•••	134

CONTENTS. V

									•			PAG
	Cattle	***	***	•••	•••	•••	•••	•••	•••	•••	•••	134
	Donkeys	•••		•••	•••	•••	•••	•••	•••		•••	135
	Sheep and	l gonts		•••	•••	•••	•••		•••	•••	•••	ib
	Wool	•••	•••	•••	***	•••	•••	***	***	•••	***	136
	A verage	value	of each	kind	of anim	al	٠	***		•••	•••	ib
	Cattle dis	cases	***	•••	***	***	•••	•••	•••	•••		138
	Governme	ent irri	igation	works		•••	•••	•••	***	•••	•••	140
	Tolwar ir	rigatio	n sche	me	•••	•••	•••	•••		•••	•••	141
	Sources o	f irriga	tion		•••	•••	•••	***	•••	***	•••	ib
	Streams		•••	•••	••		•••	•••	•••	•••	•••	142
	The Zhob	river	***	***	***	•••	•••	***	•••	***	***	ib
	Flood irri	gation	***	•••	•••	•••	•••	•••	•••	•••	•••	143
	Band-i-Da	iwi	•••	•••	• •	•••	•••	•••	***	100		il
	Springs	•••	•••	•••	***	•••	•••	***	•••		•••	ib
	Kárézes		***	•••	•••	•••	•••	•••	•••	•••	***	il
	Maintena	nce of	kártze:	and	water c	hannel	s	•••	***	***	***	150
	Division	of wate	ar		***	***	•••	•••	•••	***		151
	Water mi	lls	•••	•••	•••	***	•••	•••	***	•••	***	155
	Hand mil	ls	•••	•••		•••	•••	***	•••	***	***	156
D	s. Wages	4 m m T	Onzana									
LENT	B, WAGES	AND 1	RIUEB									
	Produce r	ents, n	acthod	of dis	tributio	on of tl	be grai	n henp	***	•••	•••	ib
	Hindubág	h Tah	síl	•••	•••	•••	•••	•••	•••	•••	•••	157
	Kila Saift	ılla	•••		•••	•••	***	•••	**	•••	•••	ib
	Fort Sand	leman	•••	•••	•••	***	•••	•••	•••	•••	•••	ib
	Wages	***	•••	•••	•••	•••	•••	•••	•••	•••	•••	159
	Wages of	herdsr	nen an	d shep	herds	•••	•••	•••	•••	•••	***	ib
	Cowherds	100		***	•••	•••	•••	•••	•••	•••	***	161
	Camelher	ds	•••	•••	***	•••	•••	•••	•••	•••	***	ib
	Mullás ar	ıd Sais	ds' wa	ges	•••	•••	•••	•••	•••	•••	•••	ib
	Carpente	r's and	blacks	mith'	wages	***	***	•••	***	•••	•••	162
	Wages of	ambár	chi	•••	•••	•••		•••	•••	•••	•••	164
	Miráb's a	nd Cha	léra's	wages	•••				•••	***	***	ib
	Wages of	стор-ч	vatcher	18	•••	•••	•••	***			•••	ib
	Kárés dig	gers	•••	•••	•••	•••	•••		•••	•••		165
	Labourer	3	•••	•••		•••	•••	•••	•••		•••	166
	Prices	•••	•••	•••	•••	•••	•••	•••	***	•••	•••	ib
WEIG	HTS AND	MEASU	RES-									
	Measures	of weig	ght	•••		•••	•••		•••	•••	•••	168
	Measures	of gra	in.	•••	•••	***	***	•••	•••	•••	•••	ib
	Miscellan	cous m	easure	·	··· ,	•••	•••	•••	•••	•••		170
	Linear m	easures		•••	•••	•••	•••	•••	•••	•••	•••	ib
	Superficia	l meas	ures	•••	•••	•••	•••		•••	•••		171

vi Contents.

	37	•									PAG
	Measures of tin	16	•••	***	***	***	•••	147	***	***	171
36	Currency	•••		***	***	•••	•••	***	•••	•••	173
	RIAL CONDITIO	N_OF	HE P	EOPLE	•••	•••	***	•••	***	***	174
Fores											
	Brief history as	•				•	it reier	V 35	•••	•••	175
	Present (1905)	_		s	•••	•••	•••	•••	•••	•••	177
	Pistachio	•••	•••	•••	•••	***	***	***	***	***	173
	Juniper	•••	***	***	•••	•••	•••	•••	***	***	179
	Olive	***	•••	•••	***	•••	•••	***	•••	***	180
	Chilghoza	•••	`**	***	•••	•••	***	•••	***	***	181
	Pinus excelsa (٠)	•••	•••	***	***	***	***	***	183
	Acacia modesta	•••	•••	•••	***	***	***	***	•••	•••	ib
	Ash	•••	•••	***	***	***	***	***	•••	•••	ib
	Minor produce	•••	•••	•••	•••	***	•••	•••	***	•••	ib
	Cumin seed (C		•	•	•••	•••	***	•••	***	•••	ib
	Нув в ор (Нувя	-		is)	•••	***	141	***	***	***	ib
	Rhubarb (Rhe:		•	•••	•••	•••	•••	•••	•••	•••	184
	Rewand chini (-	jai)	***	•••	***	***	•••	144	•••	ib
	Malkhozai (mu	lathi)	***	•••	•••	***	***	•••	***	***	ih
	Asafoetida	***	•••	•••	•••	•••	•••	•••	•••	•••	ib
	Arboriculture	•••	•••	***	•	•••	•••	•••	***	•••	ib
MINE	S AND MINERA	LS—									
	Salt			•••	•••					•••	185
	Asbestos	•••	•••			•••		***	•••	•••	ib
	Chromite	***	•••	•••	•••	***	•••	•••		•••	187
	Saltpetre		***	•••		•••	•••		•••	»·	188
	Coal		•••	•••				•••	•••	**	189
	Miscellaneous r					•••			•••	•••	191
A 1120	AND MANUFAC					•••	•••	•••	•••	•••	101
Ацтв											
	Embroidery	•••		•••	•••	•••	***	•••	. ***	•••	ib
	Carpets and oth		ollen f	a.brics	•••	•••	•••	•••	***	***	192
	Felts and Kosa		•••	•••	***	***	•••	•••	•••	***	195
	Copper work	***	***	•••	•••	***	***	***	***	***	196
	Silver and gold	lsmith	s	•••	•••	•••	***	***	•••	***	ih
	Loather work	***	***	•••	***	***	***	•••	•••	•••	ib
	Postins	•••	•••	***	•••	***	•••	***	***	•••	197
	Dyeing	***	***	•••	100	•••	•••	***	•••	•••	168
	Crude carbonal	e of so	da	***	•••	***	***	•••	•••	***	199
	Pottery	•••	•••	•••	•••	•••	***	•••	•••	•••	ib
Comm	ERCE AND TRA	DE-									
	Powindah trade			•••	***	***	***	•••	•••	•••	ib
	Local trade : in		***	•••	***	100	***			- ***	203
							•				400

Contents. Vii

											PAGE
	Fort Sandeman	ı	***	***	•••	***	•••	•••	***	***	204
	Exports	•••	***	***	•••	•••	•••	***	•••	•••	205
	Classes engaged	l in tra	ule	***	***	•••	•••	***	•••	•••	206
	Octroi, etc	•••	•••	•••	•••	•••	•••	•••	***	•••	ib.
	Daláls	•••	•••	***	•••	***	•••	•••	***	•••	ib
ME.	ANS OF COMMUNIC	CATIO	N								
	Railways	•••		***	100	.,,	•••		•••		207
	Roads	•••	•••	•••	•••	***		,	***	•••	208
	Harnai-Loralai				•••	•••				•••	ib
	The Fort Sand	_									309
	Fort Sandeman						•••	***	•••	***	210
	Khanai-Fort S				***	•••	•••	***	***	***	
					•••	•••	•••	***	•••	•••	ib
	Other roads	•••	•••	•••	***	***	•••	***	•••	•••	211
	Trade routes	•••	***	•••	••	***	***	***	•••	•••	ib
	Transport	•••	***	. ***	•••	***	***	•••	•••	***	212
	Camel contract		•••	•••	•••	***	***	•••	***	•••	214
	Telegraph office	B8	***	***	•••	***	•••	•••	•••	***	215
	Post offices	•••	•••	***	***	•••	***	•••	***	***	ib
F▲	mine—										
	Scarcity and it	s caus	CS	***	•••	***	***	***	***	•••	216
	History of perio	ods of	scarcit	y and p	protect	ive me	asures	***	•••	•••	217
	Visitations of l	ocusts	***	•••	•••	***	•••	•••	•••	•••	219
	Floods	***	***	•••	•••	•••	•••	•••	•••	***	ib
	Rust	•••	•••	***	•••	***	***	•••	***	•••	220
		C1 ***	A TOMYS			TITAM	T. 4 M 7 T T				
		CH	APTE	£ 111	-AUM.	INIST	KATIV	Ei.			
АD	MINISTRATION AND	D STA	rF—								
	Judicial Speci	al La	W4	•••	•••	•••	***	•••	•••	•••	222
	Administration			-			100	***	•••	•••	223
	Additional pow									•••	225
	Civil Justice		. IJAVIU	***	***		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***	***	•••	ib
	Criminal Justic		•••				•••				226
	Jirga cases		•••	•••	•••	•••	***	***	***	•••	227
	•	iii Lii or	uu dinta	••• •••••			***	***	•••	•••	228
	Local, joint, Sh			-	-	-	•••	•••	•••	•••	228
	System of select			ocra	•••		***	•••	•••	***	229 10
	Prevalent crim		••• ~~ h= ~	antiac	•••	•••	•••	•••	***	•••	ib
	Acceptance of				•••	***	***	•••	•••	***	ib
	Fanatical outre	_	***	•••	***	***	•••	•••	***	• • •	
	Registration	***	***	***	***	***	***	•••	***	***	230

VIII CONTENTS.

FINA	nce-									PAG
	Brief history									
	Zhob Levy Corps Cont	PR of	•••	•••	•••	•••	•••	•••	•••	231
	Levies and Police Con		•••	•••	•••	••	***	•••	***	232
		_	•••	•••	***	•••	•••	***	***	il
		 Gattle	***	•••	•••	***	•••	***	•••	ib
_	First Quasi-Provincial	Settle	ment	***	•••	***	•••	***	***	ib
LAND	Revenue-									
	Early revenue history		•••	•••	•••	***	100	•••	***	238
	Modern revenue histor	-	***	•••	***	***	***	***	***	235
,	Cash rates on miscellar		•	•••	***	***	•••	•••	***	ib
	Sale of revenue grain	***	***	•••	•••	***	•••	***	***	236
	Survey and settlement		***	•••	•••	***	***	***	***	ib
	Record of rights and it		itenan	ce	•••	***	***	•••	•••	238
	Statistics of land rever		•••	•••	***	***	***	***	***	239
	Land tenures : Jágirs		•••	•••	***	***	***	***	***	240
	The origin and charact			eies	•••	***	***	•••	•••	241
	Custom of periodical d		tion	•••	***	***		***	***	ib
	Tenants and tenancies	***	•••	***	•••	•••	***	***	***	242
	Size of holdings	•••	***	000	***	•••	•••	***	•••	ib
	Headmen or Maliks an	d their	remu	ınerati	OB	•••	•••	***	***	243
	Incidence	•••	•••	•••	***	***	***	•••	•••	244
	System of remissions as				***	***	***	***	***	ib
	Exemption of improve	ments	from	revenu	e	***	***	•••	•	245
	Waste lands	***	•••	•••	•••	•••	***		•••	ib
	Restrictions against tre	nefer	of lan	d to no	on-agri	culturi	sts	•••	***	ib
	Government land and		•••	100		***	***	***	***	246
	Water mills	***	***	•••	***	***	***	•••	***	247
	Grazing tax	•••	•••	***	***	***	•••	***	***	ib.
	Powindahs in Zhob	•••	***		***	***	•••		•••	249
	Revenue free grants, g	rain ar	nd casi	h allow	ances		***	•••	•••	250
	The Haripal muáfi		•••	•••	***	***	100	•••	***	200 ib
	Husain Nika Shrine	uáfi	•••	***	***	***	100	•••		251
	Grants to the Jogizais	•	Baif	ulla	•••	***	•••	•••	•••	ib.
	Hill Jogizais	•••	•••	•	•••	•••	994	•••	•••	254
Mysca	LLANEOUS REVENUES -				•••	***	***	***	***	209
	A ••									
	Salt	•••	***	***	***	100	•••	***	***	256
	•	•••	•••	•••	•••	***	***	***	***	ib
	Intoxicating drugs	•••	•••	***	•••	***	***	***	***	257
	Country spirits and ru		•••	***	***	***	•••	***	***	2 58
	Distillation of country	_		•••	•••	•••	•••	***	•••	ib
	Foreign liquors	•••	***	***	•••	•••	***	•••	•••	259
	Methylated spirits	•••	***	•••	***	•••	•••	***	•••	ib
	Consumers, consumption	n and	aggre	egate re	eug9y:	***	•••	•••		ib

											PAGE
	Stamps	***		•••	•••	•••	•••			•••	260
:	Income tax	•••	•••	•••	***	•••	***	•••	•••	•••	ib
PLoc	L Funds	,	•••	***			***		•••	٠	il
UBLIC	Works-										
	lmportant v	orks		•••		•••	•••	•••		•••	262
	Pipe water st	apply at l	Fort :	San len	118,11	•••	•••	•••	•••	•••	ib
	Levy posts	•••	***	***		•••	•••	•••	•••	•••	263
ARMY.											
	Zhob Levy C	orps	•••	•••	***	•••	•••	***	•••		264
	Good conduc	t allowan	CAS	***	***	***	•••	•••	***		267
	Uniform and	arms	•••	•••	***	•••			•••	•••	ib
	Asámi fund	•	•••	•••	•••	•••	•••	•••	•••	•••	ib
	Corps funds.		•••	•••	•••	•••	•••	•••		•••	268
	Services rend	lered by t	the C	orps	***	***	***	•••	•••	•••	269
LEVI	ss	•••	•••	•••	•••		•••	•••	***		271
	Zhob Kákar	servico		•••		•••	•••				276
	Transborder	posts	•••	•••	•••	•••	•••	•••	•••	***	277
Polic	E										
	Total streng	th				•••			•••	•••	279
	System of re		t and	trainir	ıg	•••	•••		•••		ib
	Measures tak	en to im	rove	the sta	tus of t	he po	lice, etc	· · · · ·	•••		280
	Arms	•••	•••	•••		•••	•••	•••	•••	•••	ih
	Cognisable o	rime	•••	•••		***	•••		•••	***	ib
	Crime in the	towns	•••	***	•••	•••	•••	•••	•••	•••	281
	Trackers	•••	•••	•••	•••	•••	•••	•••	•••	•••	ili
	Remarkable		•••	•••	•••	•••	•••	•••	•••	•••	282
	Dahana road	~	···	•••	•••	•••	•••	•	•••	***	ib
	Cattle poun	ds	***	•••	***	•••	•••	•••	•••	•••	288
JAILE		***	•••	•••	•••	•••	•••	•••	•••	***	í
EDUC	ATION-										
	Early metho	ods	***	***	•••		***	•••	•••	***	284
	Growth of 8	chools	•••	•••	••	•••	•••	•••	•••	•••	il
	Miscellaneo		•••	•••	•••	•••	•••	•••	•••	•••	28
	Libraries	• •••	•••	***	***	•••	•••	***	•••	•••	ü
MEDI	ICAL-										
	Fort Sander	nan disp	ensary	,	•••	•••	***	•••	***		286
	The Dufferi	n Fund Z	anàna	Dispe	nsary,	Fort 8	andem	an	•••	•••	il
	Hindubágh	and Kila	Saifu	lla Dis	pen ari	es	•••	***		•••	ib
	Principal di	seasos an	d thei	r causa	s	***	•••	•••	•••	•••	28
	Cholera	•••	•••	***	***	•••	•••	•••	•••	•••	28

CONTENTS.

											1 1000
	• •		•••	***	•••	•••	•••	•••	•••	***	289
		•••	•••	•••	•••	•••		***	***	•••	ib
	Small-pqx	•••	•••	•••	•••	•••	•••	•••	***	•••	ib
	Vaccination and	inocul	ati o n	***	•••	•••	•••	***	•••	•••	ib
	Indigenous remed		•••	•••	•••	•••	•••	•••	•••	•••	29 0
	Working of the p	ico pa	cket	system	of sa	le of qui	inine	***	•••	•••	291
	Village sanitation	and v	water	supply	•••	•••	***	•••	•••	•••	ib
Burv	EY8	•••	•••	•••	•••	•••	•••	•••	***	***	292
	СН	APTE	R IV	7.—MIN	HATI	URE G	AZET	TEER.			
Fort	SANDEMAN BUB-	Divis	ion-	_							
	General descript	ion	•••	•••	•••	••	•••	•••	•••	***	293
	Boundary	•••	•••	***	•••	•••	***	•••	•••	•••	ib
	Hill ranges	•••	•••	•••	•••	•••	•••	•••	•••	•••	ib
	Drainage and riv	7ers	•••	•••	•••	•••	•••	•••	•••	***	ib
	Forests	•••	•••	•••	•••		•••	•••	•••	•••	29 4
	Climate, tempera	ature, a	and 1	ainfall	• - •	•••	•••	•••	•••	•••	ib
		•••	•••	•••	•••	•••	•••	•••	•••	•••	ib
	•	•••	•••	•••	•••	•••	•••	•••	***	•••	295
	Agriculture	•••	•••	•••	•••	•••	•••	•••	•••	•••	ib
	Communications	3. 	•••	•••	•••	•••	•••	•••	•••	•••	296
	Administrative	•••	•••	•••	•••	•••	•••	•••	•••	•••	ib
	Land revenue .		•••	•••	•••	•••	•••	•••	•••	•••	297
	Special products	3	•••	•••	•••	•••	***	***	•••	•••	ib
For	Sandeman	***	•••	•••		•••	•••		•••	140	ib
Mín	a Bazar		•••	•••	•••		•••	•••	•••	•••	298
QqU	er Zhob sub-	divis	ion		•••		•••			•••	299
Kile	. Saifulla Tab	ısil—									
	General descript	ion	***	•••	•••		***	***	***	•••	ib
	Boandaries	***	•••	•••	•••	•••	•••	•••	•••	•••	3 00
	Hill ranges	•••	•••			•••	•••	•••	•••	•••	ib
	Drainage and riv	rers	•••	•••	•••	••)		•••	***		ib
	Forests	•••	•••	•••	•••	•••	•••	•••	•••	•••	ib
r	Climate, tempera	ature,	and	rain all	•••	***		•••		•••	ib
	History	•••	•••	•••		•••	•••	•••	•••	***	801
	Population	•••	***	***	•••	•••	•••		•••	•••	ib
	-	•••	•••		•••	•••	•••	•••	•41	•••	302
	Communications		•••	•••	•••	•••	•••	•••	***		ib
	Administrative	Staff	•••	•••	•••	•••	•••	•••	•••	•••	303
	Land revenue	•••	•••	•••	•••	•••	***	•••	***	•••	ih
	Special products	٠	•••	000	•••	***	***	•••	•••	•••	il

	31-61-1	m - 1/:										PAG
inc	lubágh '											
	General d	•	non	•••	***	•••	•••	***	•••	***	•••	308
	Boundari	es	•••	•••	***	***	•••	•••	***	***	***	304
	Hill ran	ges	***	•••	•••	•••	•••	•••	•••	***	•••	ib
	Drainage	and r	ivers	•••		***	•••	•••	•••	***	•••	ib
	Forests	•••	•••	•••		•••		***	•••	•••	•••	ib
	Climate,	temper	ature,	and re	ainfall	•••				•••	•••	ib
	History					***	•••	•••	•••		•••	305
	Populatio	on	•••		•••	•••	•••				•••	ib
	Agricult	are					•••		•••	•••	•••	308
	Commun	ication	s	•••		•••	***		***	•••	***	ib
	Administ	rative	Staff				***	•••	•••	***		3 07
	Land rev	enue							***	•••	•••	ib
	Special p	roducts	B			•••			•••	•••	•••	ib
Kam	ır-ud-dii	a Kar	ez			•••	•••	•••		•••	***	ib
	chugha				•••		•••	•••	•••	***	***	308
	dix I.—J		zreeme	nt ex	ecute 1	bv t	he Joi	nt Afg	zhán az	d Bri	tish	
	Commissi	ioners d	of the	Indian	Afgh	án Bo	undary	Comm	ission,	•••	***	311
Appen	ndix II.—	-Alpha	betical	list o	f com	mon	trees	and pl	ants o	f the 2	hob	
••	district		•••	***	•••	•••	•••	•••	***	•••	•••	321
Appen	dis III.	- Gene	alogica	ıl tree	of the l	Kákar	tribe	•••	•••	•••	in	pocket
Appen	dix 1V	-Alpha	betical	l list o	f agric	ıltura	l impl	emente		***	•••	330
Appen	dix V.—.	Alphab	etical	list of	princip	al a	gricult	ural, re	venue,	and sl	1 6 p-	
••	herd's ter						***	•••	•••	•••	***	332

CHAPTER I.-DESCRIPTIVE.

The District of Zhob is situated in the highland part of Baluchistán, forming the north-eastern corner of the province under direct British administration, between the basin of the Indus on the east and the watershed between India and Central Asia on the west. It lies between north latitudes 30° 32′ and 32° 4′; and east longitudes 67° 27′ and 70° 3′. Its greatest length from east to west is about 160 miles and its breadth from north to south about 88 miles. The total area of the district is 9,626 square miles.

PHYSICAL
ASPECTS.
Situation and
dimensions.

The District, as at present constituted for administrative original purposes, takes its name from the river Zhob, which, rising name to the east of the Pishin valley traverses the District from its south-western corner to its north-eastern extremity, where it joins the Gomal.

Origin o

The District is bounded on the north and north-west by the Frontier Province and Afghánistán; its eastern boundary is marked by the Sulaimán range, and the Loralai and Quetta-Pishín Districts border it on the south and west, respectively.

Boundaries.

The northern boundary was demarcated in 1894-95 by a joint Afghán and British Commission, Captain A. H. McMahon (now Major Sir Henry) being the British Commissioner and is fully detailed in the joint Agreement* dated the 26th of February, 1895, an extract from which is printed in appendix I.

The general direction of the boundary runs in a zigzag line due west to its termination at a point where it meets the northern boundary of the Quetta-Pishin District close to the junction of the Psein Lora and Tokarak rivers.

From Domandi, where the Gomal and Kundar rivers meet, the boundary runs along the watercourse of the latter

^{*} Administration Report of the Balushistan Agency for 1894-95.

PRYSICAL ASPECTS to its junction with the Kandíl river, thence along the Kandíl to where it is joined by the Sharan Toi. From this point the bed of the Sharan Toi river marks the boundary north-westwards for about one and a quarter mile where the first pillar has been erected. The rest of the boundary encloses on its south, a part of the District which is mostly plain and which is included in the tract locally known as Khurásán. From the first boundary pillar to pillar No. XIV erected on the east bank of the Kand river between Inzlan and Multani hills, the line passes through almost plain country. The principal peaks on which pillars have been erected are situated in the Pinakai, Shah-ghar and Sra-ghar ranges. From pillar No. XIV the boundary is defined by the centre of the river bed of the Kand to its junction with the Loe Wuchobai nullah, whence the boundary runs first due south and then eastwards as far as the Pinakai plain where it crosses a long range called the Nakhás hills to the south and running in the same direction again takes a sharp turn westwards till it joins the Psein Lora.

The portion of the northern boundary between the Zhob District and the Punjab, from Domandi eastwards to Khajúri Kach had already been definitely fixed by the Government of India in October, 1890, it being laid down that the Gomal river between Domandi and Khajúri Kach should be recognised as the boundary line between the Baluchistán Agency and the tribal country under the management of the Punjab.

Eastern boundary. The north-eastern point of the boundary having been fixed at Khajuri Kach, Lieutenant A. H. McMahon from Baluchistán and Mr. L. W. King, Deputy Commissioner, Déra Ismáil Khán, were deputed to lay down the eastern boundary. They, however, differed on various points and Messrs. King, Donald, and Grant from the Punjab and Lieutenants McMahon and McConaghey from Baluchistán aubsequently met to settle the first section of the boundary.

The joint proposals submitted by these officers were accepted by both the Punjab and Baluchistán authorities. and were finally approved by the Government of India in February, 1894. The boundary was defined to run from Khajuri Kach along the east bank of the Zhob river to the Zarmelán ravine, thence in a south-easterly direction along the main or northern branch of the Zarmelán nullah to the Ziárat peak (7,232 feet) and along the watershed of the Ziárat, Branj, Pisgah, and Shinsar range to a point beyond Shinsar whence it was to leave the crest of the main range and descend the spur which forms the watershed between the Khwaja and Trikha Chaprezi nullahs with their respective affluents, to the junction of the Viastah nullah with the Zao stream thus leaving the former entirely within the Punjab jurisdiction. The boundary from this point onwards was in dispute between the Bargha Shíránis on the Baluchistán side of the border and the Largha Shiranis on that of the Punjab, and was not then further demarcated. In March, 1895, Mr. Gee, Deputy Commissioner, Déra Ismáil Khán, and Captain Archer, Political Agent, Zhob, met at Mughal Kot, and after enquiring into the disputes, submitted joint proposals which were approved by the Government of India. The boundary fixed upon runs from Viastah nullah southwards along the Narai-ghar range to the Gat pass. then it passes the peaks of Abeshti Sokai and Tor Sar to the Khaisa-ghar range, then along the Pezai Kotal (8,800 feet) ridge to the Kotal at the head of the Khidderzai Dahána. Thence, leaving the maidau in the Largha country, the boundary runs south-south-west following the crest of hills called the Zarghún Zawar and Surwalai to the Manai or Wala Narai. A little south of this point, the line runs east of the Wala village including it in the Bargha country and leaving the Zawar Kar village in the Largha country.

From the Surwalai hills the boundary runs in an easterly direction through the Wala or Punga Narai till it reaches the Shah or Salat ridge down which it passes south into PHYSICAL ASPECTS.

CHAP. I.-DESCRIPTIVE.

PHYSICAL ASPECTS. the Chúhar Khél Dahána, where the boundary line is marked by a large rock in the bed of the stream called Katao Dabara. From this point the Loralai District commences and the further description of the Punjab-Baluchistán boundary will be found in the Gazetteer of that district.

The boundary between the Zhob and Loralai Districts has not been demarcated, but runs roughly in a southerly direction with the western strike of the Tor-ghar range of the Sulaimán mountains and extends as far as Bagha locally known as Tap, at which point it takes a westerly course and follows the line of the Lwara watershed, continuing through the range of hills locally known as Satiára, to the Razana river. Here again it runs due south in almost a straight line, leaving the Kashmír, Landíán, Ali Khán Kili, and Ali Ahmad villages to its west, after which the line of boundary runs roughly with the western slopes of the Súr range of the Sulaimán mountains to its termination at the source of the Machlaman river.

Southern boundary. The southern boundary has not been defined. It runs from Machlaman in a south-westerly direction to Sori (about 20 miles), thence due north for about 7 miles, whence it follows a westerly direction passing the watershed of the Churmi-ghar until it joins the Loralai-Quetta-Pishín boundary near Súrghund (about 102 miles).

Western boundary. The western boundary, which has also not been demarcated starts from Súrghund, takes a sharp curve first to the north and then west along the watershed of the Zoi hills east of Yúsaf Kach or Kats (about 20 miles). From near Murgha Mehtarzai at the village of Kanr Mehtarzai which is in the Hindubágh tahsíl, the line follows the watershed between the Zhob and Barshor rivers round the head of the Kamchughai valley in Zhob down the ridge between Murghakai and Shamshob to Tál in the Bábu Chína valley. The chain of Kand mountains thus marks the boundary northwards, which

after running through the Bábu Chína valley and crossing the Sakír range turns due west. From this point to the Kadanai river the boundary is recognised on tribal lines, all Taraghara and Súr villages being considered as belonging to Pishín, while all Mírzai villages are held to be in Zhob.

PHYSICAL ASPECTS.

The greater part of the District is covered with hills Configuration. intersected on the south by the great valley of the Zhob and on the north by the smaller valley of the Kundar and its tributaries. The Zhob valley is an immense stretch of alluvial plain, extending from the Tsari Mehtarzai pass, the watershed between the Zhob and Pishin valleys, in the form of a crescent to the Gomal river, and contracting considerably near its north-eastern extremity. Numerous small valleys run up from it into the hills on either side, the most important being Haidarzai and Ismailsai. To the north of the valley there rises a wide belt of remarkably bold hills. Unlike the hills to the south of the valley, these hills do not consist of a series of parallel narrow ridges, but rather of a chain of almost distinct mountains, some of the heights of considerable relative elevation, yet preserving a general parallelism in their strike. Among these mountains, are situated the valleys of Sharan and Khaisor, and to the north of the latter again lies the considerable valley of the Kundar, which extends from near the Arghasán watershed first eastwards and then north-eastwards till its drainage reaches the Gomal river. (N.-W. F. Gazetteer.)

The country between the Gomal and the Kand peak which is drained by the Kundar and Zhob rivers is known from its inhabitants as Kákar Khurásán.

The following description of the northern portion of the District has been extracted from Sir Henry McMahon's paper, "The Southern Borderlands of Afghánistán":—

"The general characteristics of the country may be described to consist of barren hills and mountain ranges and vast open plains, where, in most cases, either want of

^{*} The Geographical Journal, Vol. IX, No. 4, 1897, page 398, et seq.

PHYRICAL water or the unsettled state of the people has prevented ASPECTS, the cultivation of the soil. Rocks and stones, varying from the size of the huge gigantic boulders on the mountain sides to that of the small pebbles and shingle of the strands of the dry torrent beds, cover the greater portion of the surface of the country. Refreshing green cases here and there, sometimes in the form of green wooded valleys with rippling streams of pure water, sometimes in forest lands along the high mountain tops, sometimes in the form of extensive tracts of rich cultivation in wide valleys and plains, break the monotony of the vast wastes around, and afford a relief to the eye and a pleasure to the senses which none but travellers in that country can fully realize. Very interesting natural phenomena to be seen in the Kundar valley, are the mud volcanoes at Khut Kanda. These curious volcanoes are situated on a neck of high ground on the south bank of the Kundar river, and are of a thick liquid mud, which comes bubbling up from below, and every now and again surges over the crests of craters which vary from 2 to 30 feet in diameter inside. The mud deposited by this

On the south of the Zhob valley and at an average distance of about 12 miles, a succession of parallel ridges running from north-east to south-west divides the drainage of the Zhob from that of the Bori valley in the Loralai District.

overflow forms into the hard rock of which the outer slopes

of the oraters are formed."

In the north open plains occur such as that of Girdao east of Spéra-ghar, Zari Dagar, Loe Dagar, Gardai Zangal, and Késhatu.

Hill ranges.

As already mentioned, the District is intersected with hills in all directions, the Sulaiman range lying to its east; the Toba Kakar range in the north, centre, and west; and offshoots of the Central Brahui range in the south.

Sulaimán range. A range of mountains (28° 31', 32° 4' N.; 67° 52', 70° 17' E.) some 250 miles long, lying between the Gomal river on the north and the Indus on the south, and separating the

PHYSICAL ASPECTS.

North-West Frontier province and the Punjab from Baluchistán. Its backbone consists of a main ridge running north and south, flanked on the east by parallel serrated ranges. These parallel ranges may be said to begin at the Ghwailiára pass in the north-east corner of Zhob, where the Gomal river runs through the range. At this point there are two ridges, but further south their number increases especially in the vicinity of the peak called the Takhti-Sulaimán. These ridges run north and south, having between them long narrow valleys. On the Baluchistán side these flanking ranges gradually take an east and west direction to meet the Central Bráhui range. The greatest height of the range is about 11,300 feet, the elevation gradually decreasing to the southward. The following description of this range is taken from Sir Thomas Holdich's "India":—

"From the Gomal River to Jacobábád there stretches one continuous chain of mountain peaks, which, although now distinguished by many local names, may well be known under their ancient designation of Sulimani. They are, and they have ever been, through the ages of an immense past, the original habitat of the Pakhtún or Pashtú speaking mountaineers whom we now call Pathans. The Sulimáni system is not a water parting; it is not a central divide that throws off the beginning of a great system of drainage east and west. The slopes of the Sulimáni hills, both east and west, drain equally to the Indus, and it is the drainage of the western slopes that, turning suddenly and bursting through the main chain of central limestone ridges, forms those terrific gorges and rockbound mountain gates which are our only means of access to the traversable valleys of the western plateau. The main Sulimani ridge, which is the dominating feature of the Indus frontier south of the Gomal, lies back from the foot of the hills some 30 miles - which 80 miles of gradual descent from the plateau to the plains is packed close with narrow, rugged, sun-scorched, treeless ridges, composed

PHYSICAL ASPECTS. chiefly of recent clays and conglomerates, which preserve an approximate parallelism in their strike, likening the whole system to a gigantic gridiron. Narrow little 'subsequent' valleys between these sharp-backed ridges contribute an intermittent flow of brackish water to the main arteries and these again, as before described, break transversely across the general strike of the minor ridges ere they debouch into the Indus plain."

The geological formation of the southern parts is distinct from that of the north. In the former, sandstones, clays, and marls predominate; in the latter, pale marine coral limestone rests on cretaceous sandstone. Petroleum has been worked in the Marri hills.† On the southern slopes vegetation is scarce; in the central part olive is abundant; further to the north the higher elevations are covered with edible pine (chilghoza). In this part of the range there is much magnificent scenery of which the extraordinarily narrow gorges constitute the most striking feature. These clefts afford a means of communication with the Punjab, the principal routes leading from the Zhob District being through the Záo, Gat, Khiddarzai Dahána, and Chúhar Khél Dahána passes. Straight-horned márkhor are to be found at the higher, and mountain sheep at the lower, elevations.

Takht-i-Sulaimán, The highest point of the range is known to Europeans as the Takht-i-Sulaimán (Solomon's Throne), but to the natives of the country as Kase-ghar or Kaisa-ghar. The actual takht or throne is described by Sir Thomas Holdich as a ziárat or shrine; situated on a ledge some distance below the crest on the southernmost bluff of the mountain.

"The mass of the Takht itself may be described as a high tableland, about 8,000 feet above sea-level, bounded on its east and west margins by high rims formed by parallel ridges of rugged and steep outline. The western ridge

^{*} India, by Colonel Sir Thomas Holdich (1904), pp. 36-37.

[†] In the Sibi District.

A detailed account of the shrine is given under Population'

presents the highest peak or Kaisa-ghar (11,300 feet) and the eastern culminates in the celebrated Takht-i-Sulaimán (11,070 feet). This tableland, with its two parallel rims, is altogether formed by a huge cap of coral limestone." (Griesbach's Geology of the Takht-i-Sulaimán).

PHYSICAL ASPECTS.

The two ridges which are about 10 miles long and 1 mile apart have, about the centre of the valley between them, a plateau called Maidán with an elevation of 8,950 feet. The northern drainage of this area finds its way through various hill-torrents into the Lahar known also as the Khaisára stream, which eventually runs through the Gat pass to Drában in the Déra Ismáil Khán District, and the southern water drains into the nullah known lower down as Dahána Khiddarzai.

The Záo defile.

The Záo Tangi is a defile, in the Sulaimán range, and runs between perpendicular precipices of limestone rock rising above it 2,000 feet. The average width of the defile is 30 to 40 yards, but in places it narrows to 10 yards. Its general direction is right across the main ridge of the Sulaimán mountains, but it winds a good deal, varying north-north-west to south-west. The ascent throughout is gradual. The defile is noted for a formidable obstruction in it, about 31 miles from Gandera Kach, known as Sarái or dabara rock. This is an immense rock worn smooth and almost spherical by the action of flowing water. It is about 30 feet in diameter, and placed in the middle of the defile, raised on a bed of smaller boulders and stones to a height of 10 feet above its bed on its lower or east side; for there is a difference of 30 feet in the height of the bed of the defile, east and west, or below and above rock. There is no passage except to the north of the rock, and this is only 4 to 6 feet in width, and the ascent from the lower level to the higher being almost perpendicular has to be ramped - a task requiring a great deal of labour. Only lightly laden animals can get through

PHYSICAL ASPECTS. the passage. The elevation of the Sarái rock above sea level is 3,000 feet. After passing this rock, the defile presents no great difficulties. Throughout the pass, water is to be found at all times in the Záo stream, and in springs gushing out from the limestone rocks, some of which are warm springs; but the water is more or less saline. (N.-W. F. Gazettelr.)

The Gat defile.

The Gat defile is a gap in the Sulaiman range, only a few yards wide, with perpendicular sides of limestone rock, about 2,000 feet high. The bottom of this passage is of gravel and rock, and is covered from side to side with water 11 feet deep, and in many places there are large boulders. A path fit for footmen runs through this passage to Drában, 30 m les from the east end of the defile. For about 11 miles down the Gat the path follows the gravel bed of the stream through water all the way, for the next 4 miles it leads over boulders and slippery rock. and is very difficult. At the end of this distance the path makes a detour over bare rock to the right hand side, the ascent and descent of which are not deep, but very slippery. In the defile, in many places, foot-people have to pass from boulder to boulder on account of deep pools here and there in the bed of the river. (N.-W. F. Gazetteer.)

Chéhar Khél Dahána pass.

A very direct pass from the Zhob to the Déraját. The actual length of the gorge, which gradually narrows to 20 yards and in places to a few feet, is about 4 miles. The enclosing limestone cliffs are high and precipitous, rising perpendicularly some 1,500 feet. The bed of the stream is full of gigantic boulders and in the pass are a number of waterfalls from 6 to 10 feet high, with steep limestone rocks on either side. A road was made through the pass in 1894-95 and completed during 1895—1905.

Subsidiary Ranges. Shinghar.

A range situated in Lower Zhob to the west of the main Sulaimán range and separated from it by the Lahar or Khaisára valley. It extends from Kachbina on the north to the Siliáza valley on the south. The main peak

PHYSICAL ASPECTS

of the range (9,278 feet) is also called Shin-ghar. It is about 30 miles from Fort Sandeman and almost due west of the Takht-i-Sulaimán. The top is fairly level and affords a pleasant site, which is used as the sanitarium of the District during the summer months. The hill is well wooded with chilghoza, or edible pine and mountain ash. The water supply, though good, is scanty. The western slopes of the range drain into the Zhob river, and the eastern into the Khaisara stream. Paths from the Zhob valley lead through the range along the larger water courses, the principal ones being viá the Khwáza pass or viá the Chachobi nullah to Kuria Wasta in the Khaisara valley. These routes are fairly practicable by camels and the local bullocks. Of game, markhor and mountain sheep are fairly numerous. The villages on the western slopes are occupied by Haripál, and those on the east by other Shíránia.

The Torghar, the highest peak of which is Charkundai Torghar. (7,517 feet) lies between the Músa Khél Sahara on the east and the Gosa plain, in Zhob, on the west. It is a continuation of the southern hills of the Sulaiman range. Further south it is known as Súr-ghar, and there separates the Músa Khéls from the Kibzais of the Fort Sandeman tahsíl.

The eastern drainage flows into the Músa Khél country, while that to the west runs into the Siliaza and Sawara streams. The drainage of the Súr-ghar flows into the Sehan and Tangisar streams. Besides the bridle-paths leading from Fort Sandeman and Murgha Kibzai to Músa Khél through this range, a detailed description of which will be found in Chapter II, paths lead-(a) from Gosa plain by Kili Háji Ahmad to Sahara Músa Khél through the Sra Kháo stream and over the Gardai Zhara hills; and (b) the principal caravan route from Kibzai Sahara through the Adozai village, Narghosa, Kili Faizulla, Bábal Kakshai nullah, and Pazhai hills. The vegetation of the hills consists of the clive, pistachio, and wild almond.

PHYSICAL ASPECTS.

A mountain range (30° 22′, 32° 4′ N., 66° 23′, 69° 52′ E.)

in the Zhob and Quetta-Pishin Districts of Baluchistán

Toba Kákar which forms the boundary between Baluchistán and .

Afghánistán and at the same time the watershed between India and Central Asia. It is an offshoot of the Saféd Koh, with

and Central Asia. It is an offshoot of the Saféd Koh, with three parallel ridges gradually ascending in a south-westerly direction from a height of about 5,000 feet near the Gomal to the peaks of Sakir (10,125 feet) and Kand (10,788 feet) in the District. Running in a general south-westerly direction in the Quetta-Pishin District it continues under different names until eventually it merges into the Central Makrán range after a total length of about 300 miles.

The higher elevations consist of wide plateaux intersected on either side by deep river valleys. In winter the cold on these wind-swept plains is intense. They are covered thickly with the small bushy plant called southern-wood or Artemisia. Little timber is to be seen. Bosomed in the Kand mountain is one of the most picturesque glens in Baluchistán called **Kamchuhgai**. The portion of the range east of the Kand peak is inhabited by the Kâkars, that to the west by Achakzai Afgháns. The upper strata consist of flysch, known to geologists as Khojak shales, beneath which lies a conglomerated mass of shaly bands and massive limestone. Intrusions of serpentine containing chrome ore and asbestos also occur.

Subsidiary ranges. Spéra-ghar. Commencing from the north-east, in the angle formed by the Kundar and Zhob rivers, are the subsidiary ranges of Spéra-ghar, Súr-ghar, and Zhwe-ghar. The Spéra-ghar range in the centre runs from Domandi in the north, to the Chukhan valley in the South, the Girdáo, and the Sri Toi plains lying between it and the Zhob river. The highest peak is Tswarlas-guna (8,770 feet). To the east of the Spéra-ghar range and in the angle formed by the Sri Toi and Zhob rivers is the Súr-ghar range, the highest peak of which is Sáng-ghar (7,121 feet). To the west of the Spéra-ghar range and between it and the Kundar river lies the

Zhwe-ghar range, the highest peak of which, Shintsak, is 8.144 feet.

PHYSICAL

· The eastern and southern drainage of the Spéra-ghar is carried by the Sri Toi and its affluents to the Zhob; the Kundar receiving that from the north and west. The inhabitants are chiefly Mando Khéls. Chilqhoza pine is found on the range. Of the routes leading through the range the principal one is that from Mir Ali Khél through Girdáo and Shin Bazhae to Husain Nika Ziarat. A path runs from Fort Sandeman northwards through Wala, Nawe-obo, Sir Toi-tangi, and Zhwe pass to Nama Kanrae on the Kundar.

To the north of the Zhob valley in the central portion of spin-ghar. the District there stretches northwards a succession of high ranges intersected by long valleys. The first of these ranges called Spin-ghar stretches from the Kazha-tang first eastwards and then north-east, and lies between the Zhob river on the south and the Khaisor valley on the north. The highest peak called Yavháshki is 9,728 feet "The southern slopes of the Spin-ghar falling towards the Zhob valley present a most peculiar and intricate formation. First, a precipitous fall of a thousand feet or more; then successions of lateral ridges, generally very steep and rocky towards the south. Gentle grass-covered slopes to the north, intersected by numerous tortuous water courses, divided by perfectly level parallel valleys, with scarcely perceptible gradients at the points of departure of the drainage to east and west, each water-course suddenly bursting through an unexpected rocky gorge into the low country at right angles to the main course of the streams." (N.-W. F. Gazetteer.)

The northern drainage is carried by various hill torrents into the Rod Jogizai. Many paths lead through this range to the north, the most important being that known locally as the Loi Liar which runs from Khasnob in the Zhob valley through the Spin-ghar range by the western end of the Khaisor valley through Mughal Cháh to Ghazlúna in Kákar Khurásán.

PHYSICAL ASPECTS.

Cumin seed grows in this range in the rainy season, and the principal trees are pistachio (khanjak) and olive. Coal seams occur near Multani Mír Alam, Sikandar Tsari, Spín-tangi, and Toi-tangi.

Tor-ghar.

North of the Khaisor valley is another long and lofty range called Tor-ghar. It extends from the head of the Khaisor stream in a north-easterly direction to the Chukhan valley and the Zhwe-ghar range. The highest peak of the Tor-ghar range is Baliára-ghar (9,705 feet). This range is the watershed between the drainage which goes south-eastwards through the Jogízai stream and Toi-tangi into the Zhob river, and that which finds its way north-eastwards in the Kundar river. The north-west of the range is occupied by the Jalálzais; the southern slopes by the Bátozais and there are a few Mardánzais to the east. A path goes viá the Jogízai Rod, Tánishpa, and Kundar to Kamr-ud-dín Káréz. Another route leads from Toi-tangi through Oshabal and Pinakai to Tánishpa. They are practicable by laden animals.

Kand moun-

The Kand mountain, the highest peak of which is Ziárat (10,798 feet), lies to the north-east of the plain of Pishín near the head of the Zhob valley and separates Pishín from Hindubágh. The vegetation consists of pistachio, and on its western slopes juniper and wild almond; various kinds of grasses also grow. The country around Kand is entirely Kákar; on the west are the Targharas of Pishín and on the east the Isa Khél and Mehtarzai Sanatias. Paths lead from Hindubágh through Kamchughai to Háji Khán Kila and Kazha-Viála in the Pishín tahsíl.

Tabai.

The high range of Tabai is the continuation of the Kand mountain to the north-east and divides the south-east end of the Toba Kákar highland from the low-lying country of the Zhob. (N.-W. F. Gazetteer.) Its southern drainage is carried by the Oblunpsha, Hatála, Rágha, and Malghuzár hill torrents into the Zhob, while that from the north runs into the Rod Fakírzai. The picturesque glen of

PHYSICAL ASPECTS.

Kamchughai owned by the Isa Khél Kákars lies between Tabai and Kand. Asbestos is found in the southern slopes of the range in the Spin Potai hillocks near Tilérai Muhammad Ján. The vegetation is the same as that of Kand ; and shir khisht (Atraphaxis spinosa) is also found in this hill. The bridle-path from Hindubagh to Murgha Fakírzai and Bábu Chína crosses this range by Rágha Narai and a footpath from Ragha Sultanzai also goes to Háji Khán Kila in Pishín over the Mézhliár Narai pass.

Shin-ghar.

From Tabai the range continues north-eastwards as far Tsapar and as the Kazha-tangi, the first portion of the range being known as Tsapar and the latter portion as Shin-ghar. The southern drainage falls into the Zhob river through the Khazina, Lakanr, Srakhula, and Dahana hill torrents and the northern finds its way through the Shin Shobai. Kozh Kach, Horak, Roghánai and Shina Khura into the Rod Fakírzai. There are small patches of hill cultivation throughout the range.

The Sakir range is the line of hills north of, and Sakir. enclosing, the Rod Fakírzai valley. It is a continuation of the Pishin range from Nigand peak and stretches in an easterly direction from the Taghratu stream in Quetta-Pishin to the end of the valley near the Sharan tract. The Sakir peak overlooks the head of the Kundar and the comparatively open stretch of country forming the watershed between the Kundar and the Arghasán valleys. It is composed of alternate strata of hard and soft sandstone with a steep dip to the north and a difficult scarp to the From the summit (10,125 feet) on which lies a shrine, an extensive view to the north can be obtained. The sides of the range are fairly well wooded with pistachio (khanjak) trees. The southern drainage of the range goes into the Rod Fakírzai through various streams, the principal of which are Khoz Sharan, Súr Rágha, Murghakai, and Lunda. On the latter are situated irrigated lands belonging to the Fakírzais and Mardánzais. The northern

drainage through its various hill torrents is entirely utilized by the Fakirzais.

The principal routes across this range are—(a) the bridle-path from Murgha Fakirzai to Loe Band and Kamr-ud-dín Káréz via Shimli Nika; (b) from Murgha to Mughal Cháh and Késhatu known as the Srághurg route; and (c) from Kazha-tangi to Mughal Cháh by Lunda pass.

Sárghund

This range lies to the south of the Zhob valley extending. and Sorae. from the Sawara river in the east to Tsari Murgha Mehtarzai in the west. It consists of a mass of scattered hills which merge towards the west into the offshoots of the Central Brahui range and towards the east into those of the Sulaiman Range. It would appear to be a part of the Central Brahui Range. The various hills are known by different local names, but the portion east of Waltoi is generally known as Sorae and that to the west as Surghand. The range roughly forms the boundary between the Zhob and Loralai districts. The highest peak of the range is 10,609 feet. The southern slopes of the range lie partly in Pishin, Shahrig, and Bori. The northern drainage passes through various hill torrents into the Zhob, but the water from the part known as Sorae is mostly utilized for irrigation purposes. The southern drainage goes to the Loralai District. A track from Hindubágh goes via Marzaghan, and then through Tor-tangi to Chinjan in the Loralei District, and another to Spéraragha via Khátúka Several tracks lead through the eastern portion of the range, the principal of which is that from Kila Saifulla via Nishpa and Kohár-tangi to Loralai. An alternative route from Akhtarzai passing through the Dolu hills meets the route at Kohár-tangi in the Loralai District. Another route from Gwal Haidarzai goes via Barat Khél, Gidar Chah, and Torkhazai-tangi to Loralai. They are all passable by beasts Chromite ore is found in the offshoots of this of burden. range called the Jang Tor hills.

PHYSTOAL ASPECTS,

"The general direction of the rivers is west to east. They run almost at right angles to the lines of mountain -ranges which separate them from India, and which they Rivers. have had to cut through one by one before reaching the lower levels of the Indian plains. In cutting through these ranges these streams have formed deep, narrow gorges, which in each successive range, become deeper and deeper as the level of the river bed sinks lower and lower below the level of the crest of the range. Thus when the Sulaimán range is reached, the drainage flows through narrow gorges of almost stupendous depth. imagine anything finer than some of these gorges. Some of them, and especially those in the streams known as the Chúhar Khél, Záo and Gat Dahánas, are really marvellous gorges, wild and gloomy in the extreme."*

The two principal drainage channels of the District are the Zhob and Kundar rivers, both of which flow into the Gomal. From the north these rivers receive the drainage of the Toba-Kákar range, and from the south the Zhob river receives that of the hills dividing the Zhob valley from the catchment area of the Nari river.

The Zhob river rises at the Tsari Mehtarzai pass on the eastern watershed of the Pishin valley, and has a total length to its junction with the Gomal river of about 240 miles. In its course, it is distinguished by various local names. The first affluent of importance is the Kamchughai stream which rises in the Kand mountain and runs through the narrow winding glen of the same name. The stream is perennial as far as the Rágha Bákalzai village at the mouth of the glen, but during the rains, the water flows further eastwards and at the village of Kárézgai merges into the The Kamchughai stream receives the main stream. drainage of the surrounding hills and affords a considerable amount of cultivation. The Zhob river flows about the

The Zhob

^{*} The Southern Borderlands of Afghanistan, by Captain (Sir Henry) McMahon. The Geographical Journal, Volume IX, No. 4, 1897.

centre of the valley as far as Kazha. A permanent perennial stream first appears in it about 45 miles from the source. up to which the dry hill torrent is generally known by the name of Lahar. For the rest of its course it has a perennial stream. After Kazha it gradually begins to cross the valley still continuing eastward, till near Haidarzai it infringes on the spurs of the hills to the south which turn its course north-eastward into the valley. It then flows about the centre of the valley again and is known throughout its course hence by the name of the Lora. At about 121 miles from Haidarzai it is joined from the south by the Landai and Ghazlai rivers and about 2 miles further the Kandil river falls into it from the north. The Sawara. which contains a good stream of excellent water throughout, falls into the Zhob river from the east, about 13 miles from the Kandíl junction. The Zhob river, still following a north-easterly course, passes about 2 miles to the west of Fort Sandeman and near Déra (about 29 miles from the Sawara junction) enters the hills. About 30 miles further on, and about 2 miles to the south of Mir Ali Khél, it is joined by the Sri Toi river from the west. Passing to the north of Mughal Kot Fort (about 14 miles from Mír Ali Khél), it finally falls into the Gomal near Khajúri Kach. Owing to the height of its scarped banks, the water of the Zhob river cannot be utilized for irrigation till near the Sama Khwal hill, north-west of Mína Bázár, where the first channel for irrigation is taken off, for the Sandiár lands of Bádenzai.* The Zhob is a sluggish turbid river flowing in a channel varying from 40 to about 80 yards in breadth between scarped clay banks about 15 feet high and quite disproportionate to the volume of water usually flowing in it. It is a shallow stream, seldom exceeding 2 feet in depth in the largest pools, and in many places not more than about 6 inches, and about 20 feet in breadth. But there are evidences that floods 2 or 3 feet higher than the present

^{*} Further details of irrigation are given in Chapter II, Agriculture,

level of the water sometimes sweep down the channel, Physical Though they are said to be of short duration, they would offer an impassable obstacle while they lasted. From its source up to Kazha, the bed can be crossed at all times of the year, but the course of the river between this place and the point where the Sawara joins it, is difficult to cross except at the regular fording places which exist at short intervals along it. Great care is necessary when crossing, as the bed of the river is very soft and in many places somewhat resembling a quick-sand. The banks on both sides are intersected by innumerable fissures and ravines among which it is difficult to find the way to the fords without a guide. The exposed parts of the channel are frequently covered with a white efflorescence but the water is sweet. Tamarisk and rushes grow along the channel in many The southern watershed dividing the drainage of the Zhob from that of the Bori valley is at an average distance of about 12 miles only, south of the Zhob river. The northern watershed dividing the Zhob from the Kundar drainage is about 40 miles distant. (N.-W. F. Gazetteer.)

The Kundar rises from the central and highest point of the Toba-Kákar Range, a few miles north-east of the Sakír mountain. It first runs eastwards for a few miles, then southwards through low intricate ranges until it again runs in a north-easterly direction through the valley of the same name. The upper portion of the river from its source to its junction with the Kandil or Zhizha at Shpola Lwara, a distance of approximately 70 miles, is within British Thence to its junction with the Gomal at Domandi it constitutes the boundary between British and Afghan territory. In the upper reaches of the river water first appears at upper Nigánge, south of the Sanzal pass: thereafter water is found at long intervals and is brackish in many places. Short stunted grass and tamarisk grow along the river banks. From lower Nigange to Kila Mulla Kamal the valley is open, but below this the river flows

Kundar.

between deep banks of mud and boulders, with numerous side nullahs, and the road becomes difficult as far as Shpola Lwara. The water is brackish throughout this portion of the river. Below Shpola Lwara the river makes a sudden turn to the south-east through a high range of limestone bills, and is confined in a narrow tangi for over 4 miles after which it emerges at Nama Kanrai into an open valley. At this place is a ziárat below which the river again begins to cut deep into the ground and is closely hemmed in by hills on both sides, and just below Khut Kunda it flows in a deep gorge in the mud hills. this place there are springs containing sulphur. From this point downwards the river flows in deep banks of halfformed conglomerate, cut up by deep side ravines and increasing in height, until at Domandi it is 200 to 300 feet below the general level of the country on either side. Before reaching Domandi, it affords a little irrigation in Sra Darga and Husein Nika. The main feeder of the Kundar is the Wali Murgha which also takes its source in the same range as the Kundar. It runs through the Jalálzai, Mardánzai, and Lawána tracts and flows into the Kundar a few miles above the junction of the latter with the Kandil. Beyond Domandi the combined stream is known as the Gomal and passing by Khajúri Kach enters the North-West Frontier Province.

Chukhan or Sri Toi,

The Chukhan drains the country to the north-east of the Khaisor valley. It rises on the southern slopes of the range north of the Mardánzai country, and thence flows down an open valley in a north-easterly direction. Near Ambára, it takes a sharp turn to the east, is joined by the Sharan from the west, and after passing through the Sri Toi Tangi, continues under that name. Below this point it receives all the eastern drainage of the Spéra-ghar range by means of a number of hill torrents, the principal being the Gardani stream which drains the southern portion of the Girdao plain. The stream still flowing in a north-

easterly direction falls into the Zhob, about 2 miles south of Mir Ali Khél.

PHYSICAL

The Rod Fakírzai rises in the Loara watershed near the Rod Fakírsai. shrine of Adilai Nika to the west of the Sakir Range and is known as the Losha Kar. It is joined from the northwest by the Taghratu or Malikar stream. At Murgha Fakirzai, water from a large spring runs into it and the supply is considerably increased by several other springs in its course south-eastwards. The stream receives the drainage of the Sakir Range from the north, the principal feeders being the Khozh Sharan, Sur Rágha, Murghakai, and Lunda hill torrents. Similarly the Shin Kach, Shin Shobai and Kozh Kats hill torrents bring into the Rod Fakírzai the drainage from the bills to the south The stream becomes perennial near Murgha Fakírzai and runs past the Zangal, Salák, and Bábu Chína villages, but its water is not used for irrigation until it emerges fromi the Kazha Tangi, and waters the Khoidadzai and Mirza lands of Kazha. The flood water finds its way to the Zhob river. Below Bábu Chína tamarisk trees grow plentifully in the bed of the stream.

The Rod Jogízai is one of the largest feeders of the Zhob Rod Jogízaí river having its source in the northern hills of the Sakir (Khandil). Range and flowing eastward for about 50 miles. For about the first 30 miles of its course, it is known as the Gargasamalan and drains a glen of the same name. It then enters the large valley of Khaisor and receives the drainage of the Tor-ghar and Spin-ghar Ranges from the north and south, respectively. In the Khaisor valley it is known as the Rod Jogízai to its junction at Toi Tangi with the Wátiál or Washabal stream coming from the north. At Sharan in the Khaisor valley the river becomes perennial and below this point irrigates several flats on its banks. At the Toi defile the river turns sharply southwards under the name of the Toi and flowing through the Spin-ghar range, debouches into the Zhob valley where it is called the Kandil. After entering

the Zhob valley it takes a sharp turn eastward and eventually flows into the Zhob river. From Sharan to the Wátiái plateau, the water is utilized by the Jogizais and from the Toi defile to the point where it enters the Zhob valley by the Bátozais. The stream remains perennial only from Sharan to where it issues from the Spia-ghar hills and it is only during winter that flood water runs through its entire course. The only villages which receive irrigation are the Rod Jogizai and Kázha Kach. Flood water is, however, utilised by the Bátozais for dry crop cultivation in the Zhob valley to the south of the Kandíl. The bed throughout is stony except in the Kandíl where it is sandy. Tamarisk grows abundantly at several places.

Sawara.

The Sawara river rises in the Gosa plain, and, after collecting the drainage of the Bábar-ghar Range and of the hills to the east of the Gosa plain, flows in a south-westerly direction to Adozai. Here it is joined by the Pilkanrae. astream having its source also in the south-western portion of the Gosa plain. The tracts irrigated by the Sawara above Adozai are Khosti, Takhai Sulaimanzai, Kot, Manézai, Hadézai, Ahmadzai, Alizai, Barwála, and Lakaband, while the Pilkanrae irrigates Shamamzaj, Khadozai, Ghundi Sulaimánzai and Pitáo Zakozai. Below Adozai, the Sawara river, after winding round the southern end of the Mazgher hills, and irrigating the Haidarzai, Sabákzai, and Ismáilzaí villages, turns north-west and eventually joins the Zheb river, about 4 miles to the west of Miss Bazar village. About 4 miles south of Mina Bázár, the Sawara is joined by the Mazghár, a stream which irrigates most of the land of that village. The Sawara contains a considerable flow of water throughout its course, but much of the water is drawn off for irrigation purposes and to work a watermill, while the rest is absorbed and lost in the bed of the stream which consists of sand and gravel. Near Sabákzai tamarisk grows abundantly.

the drainage of the southern hills of the Shin-ghar Range of the Sulaiman mountains, runs westwards and is known Siliana. as Laharai till it joins the Garda Bábar, a perennial stream near Bráhim Khél village, below which it is called Siliáza. It is joined near Kapin by the Algad Bábar stream from the south. It affords a considerable amount of cultivation in the Garda Bábar, Bráhim Khél, and Kapíp villages. At Kapip the water is considerably increased by numerous. springs and is drawn off for irrigation in Taki, Hasanzai,

Mandézai, Apozai, and Fort Sandeman. Drinking water for Fort Sandeman is also piped from Kapip springs.

This stream rises in the Hatsu watershed and receiving

The Khaisara stream takes its source near the Haisu Khaisara. watershed and carrying the drainage of the southernmost hills of the Kaisá-ghar and Shín-ghar runs northwards between those ranges, a permanent supply of water occurring first at Kánrghalai. After irrigating the lands of the villages of Kuria Wasta, Ahmadi Dargha, Niázi Kot, and Kachhi, it continues its course due north and taking a sharp turn to the east through the Gat Pass in the Sulaimán Range, drains a large supply of its water into the Déraját.

This stream receives the drainage of the eastern alopes of the Satiara hills and of the Loara plain. These hills form the northern portion of the Tor-ghar hills of the Sulaimán Range. To the east of the Loara plain the stream turns north and then east through the Chuharkhel Dahana gorge. In its upper course the stream is dry but at Dahána Sar. the western entrance to the gorge, a fine stream comes to the surface, and enters the gorge by a narrow rift in the rock called Katao Dabara. The stream in dry weather has a depth varying from 6 inches to more than 2 feet, and flows through the gorge with great velocity.

The broad plain of the Zhob occupied by alluvial forma- Geology. tions of considerable depth, separates two mountainous

Chúharkhél Dahána stream.

The editor is indebted to Mr. E. Vredenburg, of the Geological Survey of India, for this section.

regions of different character and constitution. That forming the northern and greater part of the District, beyond the left bank of the Zhob, consists almost entirely of an extensive and monotonous series of calcareous sandstones and shales known as "Kojak shales" all of one geological age, the oligocene, corresponding with the European rocks known as "flysch." The hilly regions situated beyond the right bank of the Zhob, only a comparatively small portion of which occurs in the District, forming a narrow fringe along its southern and eastern boundary, are far more varied in composition and structure. The most interesting rocks of this region are the carboniferous and triassic slates and the igneous intrusions occurring south of Hindubágh. The igneous intrusions consist of a heavy rock known as "gabbro," and form considerable hill masses, the highest peaks of which attain an absolute height of nearly 10,000 feet. They represent the remnants of a great volcano of Upper Cretaceous age belonging to the same volcanic system as the Deccan Trap of the Indian Peninsula. Some of these rocks are altered into serpentine accompanied by valuable deposits of chrome iron ore. Some minor outcrops of this same serpentine, also chrome bearing, occur north of the Zhob, along a zone of "Siwalik" strata and eccene nummulitic, limestones fringing the southern edge of the great outcrop of Kojak shales. The "Siwaliks" consisting of conglomerates, sandstones, and bright-coloured clays impregnated with salt and gypsum. belong to a series newer than the Kojak shales. eccene nummulitic limestones which are older than the Kojak shales occur at various places in the midst of the Siwalik belt north of the Zhob, and also at intervals along the southern border of the District. These eccene nummulities belong to the Kirthar series of Indian Geological nomenclature. The Laki series or coal-bearing series of Baluchistan, which is somewhat older, has not been observed in the Zhob District. The south-eastern

border of the District contains strata of liassic (lower jurassic), middle jurassic, lower and upper cretaceous age mostly shales and flaggy limestones, with the exception of the middle jurassic which consists of a vast thickness of massive limestones and sandstones, such as constitute the lofty ranges west of the Takht-i-Sulaimán. Detailed geological accounts of this region have not yet been published. A map showing the geological features of the Hindubágh neighbourhood has been issued in the Records of the Geological Survey of India, Volume XXXI.

No scientific information is available regarding the vegetation of Zhob. The principal trees found in the highlands are olive, pistachio, and edible pine. Wild almond and willow are also not uncommon. Tamarisk grows abundantly along the beds of the streams. Scattered about the District there is a small growth of spalmai (Calotropis gigantea), and pastawana (Grewia oppositifolia). Juniper is found mostly on the Surghund hills in the Hindubagh tahsil. Gurgura (Reptonia buxifolia) grows in small quantities in Kaisa-ghar. On the hills round Tánishpa there is an abundant growth of carob trees and stunted junipers. Raghbolai (Peucedanum Sp.), arguch (Scorzonera mollis), and naghuras a wild plant, grow all over the hills and are used as a famine food. Bushka (Lepidium draba), shézgi (Eremurus aucheriana') are common and are used as vegetables, also khokhae or wild onions. Other plants of importance are khamazura (Withania coagulans), rhubarb or pushai (Rhsum emodi), and maraghuna (Citrullus colocynthis).

Zira (Cuminum cyminum), ispaghul (Plantago ovata), and spánda (Peganum harmala), grow in great profusion all over the hills. Hyssop or zúfa and shinshobæ (Mentha sylvestris), are also common. Assícutida grows only in the Zhazh Bázhae hill of the Spéra-ghar range. Shorai (Haloxylon grifithii) is found in the lower valleys, and along the Zhob river. Of wild bushes the most common are mákhai (Caragana), uma (Ephedra pachyclada), and léghúnae

Botany

(Daphne olecides), the last named being poisonous. Grasses of various kinds grow, the most important being called locally sába, páh, and sargaras. Along the Kundar. valley, a small bushy plant about 2 feet high locally known as tirkha (southernwood or Artemisia) grows thickly over both hill and plain and forms a favourite food for camels, goats, and sheep.

Near Chúhar Khél Dahám, the maiden-hair fern grows in profusion and Acacia modesta is also met with.

A list of commoner trees and plants growing in the District is given in appendix II.

Fauns.

The wild animals include the wolf, jackal, hvens, fox, and porcupine, all of which are common throughout the District. also badger, which is found in the Upper Zhob valley. Leopards are occasionally found in the high hills of the Sulaimán and the Toba Kákari ranges. The black bear occurs only in the Shin-ghar and Sulaiman ranges. Wild pigs are met with along the Zhob river. The southern slopes of the Shin-ghar Range, north of the Zhob valley, form a great breeding ground of straight-horned markhor and wild sheep. In the plains through which the Kandil runs into the Zhob, deer are found in fairly large numbers. Hare occur everywhere in the hills. Fox and jackal are trapped by the Macharzais, Fakirzais, Kamálzais, Mardánzais, and Abdur-Rahímzais in the Hindubágh and Kila Saifulla tahsils, and the skins sold to the Kandahári and Quetta merchants. Of game birds, chikor and sisi are numerous in the higher altitudes, and partridge, pigeon. sandgrouse, quail, and bustard are met with in the plains. Among other birds, the dove, hoopoe, starling, and wagtail are the most common. The lammergeier and large black vulture are common everywhere in the higher ranges. On the higher slopes of the Takht, the jay, blackbird, woodpigeon, cuckoo, and thrush are met with. Wild duck abound in the Zhob river in winter, when pelican also appear in large numbers. Among reptiles, snakes occur.

especially in the Loara Chuhar Khél, and scorpions are met with everywhere. Every running stream abounds in fish, chiefly makeir (Burbus mosal or tor) some of which weigh up to 8 lbs. Fishing is obtainable in the Zhob and Sawars rivers.

PHYSICAL ASPECTS.

The climate is dry, and in the winter months, bracing. CLIMATE TEMPERATU-Dust-storms occur in summer from July to September, REAND RAISaccompanied by thunder-storms, rendering the climate of FALL Climate. Lower Zhob somewhat enervating. On the other hand, Upper Zhob and the highlands possess excellent climatic conditions. The temperature varies with the height above sea-level, but averages about 82° in summer and 47° in winter. In Lower Zhob, the heat is unpleasant from May to September, and great diurnal variations of temperature are experienced in winter. The western end of Upper Zhob is cool in summer and cold in winter.

Generally speaking the seasons are well marked. The seasons year is divided into four principal seasons, known as psarlae. spring (March to May); dobae, summer (June to August); manae, autumn (September to November); and zhamae or samas, winter (December to February).

The District, like other parts of Baluchistán, lies outside Rainfall. the monsoon area, and the rainfall is scanty and varies with the altitude. It ranges from about 4 inches in Kila Saifulla to about 10, in Fort Sandeman. The stations at which rainfall is recorded are Hindubágh, Kila Saifulla and Fort Sandeman, details of which are given in table I. Volume B. Fort Sandeman receives the largest amount. 9-55 inches, Hindubágh comes next with 4:92, while Kila Saifulla, receives 4.15 inches. The largest rainfall is received during the winter months, namely, from October to March. the latter being the rainiest month of the year. At this time of the year, snow falls in the greater part of the District. During the summer months, rain falls in July and August.

The direction of the winds varies with the seasons, but winds. as in other highland districts of Baluchistan, is much

affected by the mountainous character of the country. In spring, the south-west, and occasionally, the south winds, blow, and are locally termed barvo and shkar or Kháránai. respectively. In summer, east and south winds are prevalent. In autumn, the prevailing wind is that from the west, locally called barvo. In winter, the wind frequently blows from the west and is very cold and piercing, sometimes continuing for weeks at a time. South-west and east winds are also common, the latter invariably bringing rain. The north wind or kadavo occasionally blows during September to April, brings on drought and damages standing crops.

Floods.

The only floods of any importance occur in the Zhob river during July and August, but none are recorded to have ever caused any very serious damage. The hill torrents are also liable to sudden floods during the summer months, and while in flood, are impassable.

Earthquakes.

A slight shock of earthquake is said to have been felt in the autumn of 1897, when several houses fell down in Pasta Kili, Kachi, Kila Barkhurdár, and Ghwarlama. No loss of life or cattle occurred, but in Shín-ghar, a number of trees caught fire by the friction of flint stones and were burnt down. A cyclone in 1898 caused much loss in Hindubágh; live-stock perished, lives were lost, and trees and houses seriously damaged.

HISTORY.

The chief historical interest of the Zhob District lies in the fact of its having been the cradle of the Afghán race. It is, however, only possible to catch occasional glimpses of the ancient history of the country which is, like that of the rest of Baluchistán, enshrouded in much obscurity. The fact that the country is situated on one of the high roads of trade from Afghánistán to India lends colour to the supposition that it played an important part in early history. The Chinese pilgrim Hinen Tsiang who visited India at the beginning of the seventh century describes the Afgháns as then living in Zhob and it was possibly from this District as

their base that they emerged to seek riches and even empire HISTORY. in India. In 1030 A.D. the Afghans are spoken of by Al Biruni as tribes inhabiting the mountains which form the western frontier of India and extending as far as the Sind valley. Early in the thirteenth century, Zhob, together with other parts of Baluchistán, came within the sphere of the raids organized by Chingiz Khán, the Mongol. In 1898, we read of an expedition led from Kandahár by Pír Muhammad, grandson of Timur Lang, against the Afghans of the Sulaimán mountains, which appears to have penetrated the Dis-Subsequently we find no mention of the country for several centuries and no opinion can be hazarded with any approach to certainty regarding its history. The migration of the Yusufzais from Zhob to Swat has been recently traced. No authentic information exists as to any foreign occupation though it is interesting to note that many forts, mounds, and kárézes, the construction of which is attributed by the people to the Mughals, are scattered throughout the country and that Mughal remains have been discovered in the conterminous District of Déra Ismáil Khán. Both Nádir Sháh (1736-47 A. D.) and Ahmad Shah (1747-73 A. D.) extended their power through Baluchistán, and thenceforth Zhob remained under the more or less nominal suzerainty of the Durránis and Bárakzais till it passed under British protection.

In the middle of the eighteenth century Ahmad Sháh granted a sanad to Békar Nika, fourth in descent from Jogi and the head of the Jogízai family, conferring upon him the title and position of "Bádsháh or Ruler of Zhob," and also a gold ornament usually worn in the turban as a token of royalty. This family continued to exercise authority over the Kákars until the British were first brought into contact with them.

The late Amír Abdurrahmán, after being completely defeated at the hands of Shér Ali in the Hazéra hills in January, 1869, passed through Zhob on his way to Seistán with a party of about 300 followers. The Zhob Kákars

attempted to levy blackmail from him and the late Amír has given the following account* of his adventures, which is interesting as shewing the conditions then prevalent in the country :-- "We halted there (Kaniguram) for seventeen and started for Wana, halting there davs two days, after which we crossed the Gomal river. Starting from there we reached the territory of the Shirani people, at a place containing only two habitations." "Next day we reached one of the villages of Kákar Zhob, where we bought flour, butter, and mutton, also cooked food enough to last two days, doing the same in future. We next arrived at a village called Dihbring, where we laid in a store of provisions. When we had started a few miles, we saw about 2,000 men standing awaiting us in our road, carrying naked swords. When I demanded to know what they wanted of us, they replied that the name of that place was 'Zhob,' and if we did not pay them twenty rupees a head as duty, they would not let us go. I argued that if we gave in to them the whole Kakar country would also intimidate us into paying duty, so I refused, and made ready to fight. Seeing this, they declared they were only joking, and let us go on our way. Before we arrived at the end of our day's march, an old man at the head of ten disciples, wearing a white turban, with hair matted on each side of his ears, and carrying a stout stick in his hand, appeared in our road. This apparition had been preceded by two of his followers, who told my uncle that they were chiefs of the country, and on the appearance of this old man they bowed low to him. saying to us: 'This is a holy Sayad.' At this my uncle rose, and after kissing his hand, seated him beside him. I had seen many impostors of this kind, and his appearance gave rise to the suspicion that there was something behind all this saintliness. It was my habit on going into every fresh village to make the acquaintance of some inhabitant,

^{*} The Life of Abdur Rahman, Amir of Afghanistas (London: 1900), Vol. I, Chapter IV, page 111, et seg.

and present him with a few rupees to give me information HISTORY. of all that was going on there. On my making enquiries of such a spy, he told me that the old man was a celebrated thief, having a band of 100 robbers under him, and he had brought forty of them with him to plunder our property. I reported this to my uncle, who would not credit the story, and, instead told his son Sarwar that the "Saint" was to be a guest in the Camp for the night. Near sunset, a few men surrounded the wells from which my servants wished to water our horses. Seeing this, and being on the look out for treachery, I had recourse to the ruse of dividing up my horses into small bands, and sending a double escort of men to water them in different parts of the village at different times, without approaching those wells near our Camp, where the robbers were waiting, and where they expected the horses would be watered. In this way our horses (300 in number) all arrived safely in Camp. My uncle and his son had about fifty horses, and their followers who looked after them brought word to him that the men surrounding the well refused to allow them to go near it. At this the 'Saint' professed anger, saying: 'I will go with the horses and command the people to allow your servants to give them water.' This he did, and when some distance off, he sont the grooms on to draw water in buckets, and when they were thus employed he and his men ran off with thirty horses, twenty being rescued by our sowars, of whom five were wounded. The next march my uncle's followers were obliged to ride behind the backs of the others. On the eleventh day we arrived early in the afternoon at a village in the Kákar country, where my followers laid in provisions for Next day westarted on themselves. our way again, in a heavy wind and dust-storm. When we were near our halting village, the chief of the tribe came out with two sowers to receive us. Before he met us, one of his servants came to tell us that 'Shah Jahan Padshah is on

his way to receive you, you must dismount and embrace him.' My uncle asked me what we should do. I replied that before deciding I would go on in front. I went ou, and saw. two men coming towards me. I asked one of them where his king was, to which he replied that his companion was he. This so-called king was an old man, wearing a coat of old sheep-skin, which was patched in parts with different pieces of coloured cloth, where the skin was worn. He wore on his head so dirty a turban as to disguise the material of which it was made. It also had no conical cap in the centre. On his feet were woollen socks, without any shoes. His mare was nothing but skin and bone, with bells tied to her knees and the saddle was of wood. The bridle was of hair-cloth. with bells tied to the corners. Jahán told me he had prepared some goat's flesh soup, and had forty pieces of Indian corn bread. I assured him it was too grand, but we would go ahead and see about it. With this excuse I got him away from the horses. After going on for about a mile I said I had forgotten some necessaries, and must go back to fetch them. At first he would not agree to go on without me, but on my saying I would bring back sugar with me, he was delighted, and consented at once. I returned to my uncle, and asked what he thought of so grand a king, and he laughed. On our entrance to the village we began hunting for the king, for some time in vain, but at last discovered him in a hut made of straw. He told me that he had sent for fuel from the jungle with which to cook, but it had not yet arrived. Also, the bread was not baked, because the sheet of iron on which it was to be baked had been borrowed for a marriage ceremony. I replied: 'It does not matter if you have nothing to eat, we are your guests.' I then sent for our own provisions. "We staved that night in the jungle, and next day the king came and told me that our next halt would be in the village of his cousin, Dost Mahomed, who would give us a warmer reception than he had done. He said it would be better for

us to start early. We enquired for a guide, on which he History. offered his own services. I suggested to my uncle that there was perhaps some reason for this, but he did not think so, and we started.

"At the end of our first day's march we arrived at the bottom of a high mountain, and the next day we had to cross another, passing through a village where there were no inhabitants. I told my uncle that our devil guide was leading us astray, and we had neither grass for the horses nor food for the men. I asked him what we should have done if we had not had provisions for two days with us. We halted in the desert at night.

"The next day Dost Mahomed came to meet us with 2,000 followers, sending a man on first to tell us he was at our service. He asked us why we had come such a difficult way, and not kept to the road, and when he found our guide was his cousin, he demanded that he should be given over to him as his enemy for having taken us by the mountains to escape passing his village, and by so doing cast a disgrace on him. He told us we must retrace our steps a long distance to get to his house, where he hoped to entertain us, having prepared Indian hemp for us to smoke, and provisions for my followers. I said to my uncle: 'If you had been warned by me. this would not have happened. What are we to do between these two devils.' During this conversation a few thieves who had been sent by Dost Mahomed to plunder any thing of ours they could come across, had attempted to steal our baggage, for which they were fired upon and wounded. On hearing this, Shah Jahan went and hid himself, and I suggested leaving the place in the night, or the followers of Dost Mahomed would fight us. At last we found Shah Jahan. and told him that as he had brought us there he would have to take us back again. He said he had hidden for fear we should hand him over to his enemy, Dost Mahomed, but we promised not to do so, and marched with him all that night. although the cold was severe. We passed no village where

we could get food until the afternoon of the second day, when we arrived at a deserted village, to be again disappointed. I asked the king of devils where the people were, and he said the people come in the spring, and leave for the top of the high mountain which lay before us, so soon as it got cold. I said: 'Curses be on your father, we and our horses have no strength left, this is due to your mischief.' He said we had better go on to the mountain and meet the people there, who would give us food. He said he could not go with us, as the tribe was hostile to him and his family. We were glad to get rid of such a man, and gave him leave to go, and after sunset we arrived on the mountain near the habitation of the tribe he had spoken of. They received us very kindly, after just preparing to fight us, thinking we were sowars of a rival tribe. We were very pleased to eat again, and feed our horses, but they would not allow us to pay for any provisions."

Modern history.

*From the outbreak of the Afghan war in the year 1878, when the attitude of the Kákars of Zhob first became a matter of any importance to us, to the year 1884, the chief authority over the Kákars of the Zhob and Bori valleys and the adjoining Districts of Kach and Kowas was exercised by the Jogizai family of Zhob Kákars. This family is descended from one Jogi and is divided into two rival factions known as the Ishak Kahol and the Nawab Kahol after the two sons of Mukam son of Bekar Nika, who was fourth in descent from Jogi. The most notable member of this family was Shah Jahán, one of the six sons of Nawab, and in his hands rested almost the whole power, though his cousin, once removed. Dost Muhammad, a grandson of Ishák, constantly endeavoured to head a separate faction. Shah Jahan by means of the natural strength of his character and his great reputation as a sainted Fakir and a miracle-worker, not only obtained authority over all the numerous sections of the Sanzar Khél

This account has been mainly taken from the Administration Report of the Zhob District for the year 1890-91 written by Captain I. Mac Ivor, Political Agent, Zhob; and from subsequent Administration Reports.

Kákars, but also succeeded in extending his influence among HISTORY. the Sanatia Kákar tribes, such as the Sárangzais and Pánézais, so that he could count upon their support in any line of policy he adopted. It became known very early in the course of the Afghan war that Shah Jahan was hostile to the British and would give trouble on the lines of communication when opportunity occurred. Accordingly when the first of the columns that were ordered to return to India by the Thal-Chotiáli route in 1879, reached Bagháo, a plac about 10 miles from Sanjáwi on the Duki road, news was received that Shah Jahan was advancing to attack the column with a following of about 4,500 men; half the troops went out to meet the advancing force and an action ensued in which Shah Jahan was defeated with heavy loss. This sharp lesson checked the fanaticism of the Kákars for some little time, and Shah Jahan tendered his written submission. but he failed to come in to offer it in person. The murder of the British Envoy at Kabul, however, and the abdication of Yákúb Khán gave rise to farther excitement among the Kákars, and early in 1880, Captain Showers, Superintendent of Levies, was murdered on the Uzhdapasha pass between Khost and the Hanna valley, the perpetrators belonging to the Pánézai section of Sanatias. This was followed in the autumn of the same year by an attack on the military post at Kach by Zhobis, Súrangzais, and Pánézais, instigated by Sháh Jahán, in which they were defeated. The termination of the Afghán war brought the District of Thal-Chotiáli under British rule, in accordance with the terms of the Gandamak treaty with Amír Yákúb Khán. But as this part of the country was only separated from the Bori valley by a low range of hills, Shah Jahan and his Bori friends, the Hamzazais, Utmán Khéls, Kibzais, etc., found it very easy to harass the district by outrages on employés of the Government. A series of these outrages ensued, culminating in the attack upon a large number of coolies employed in building at Duki. It was felt that the frontier could never

pedition, 1884.

be safe and the railway and other works never tree to a danger, until Shah Jahan was finally settled with and hostages taken from him for his and the Beriwals' future. good behaviour. The sanction of the Government of India was accordingly obtained to a military expedition being sent Ex- into Zhob against Shah Jahan, and in April, 1884, orders were issued for the movement of troops into the Zhob valley, but owing to difficulties in procuring food and carriage at that time in the country through which the troops had to pass, it was decided to postpone the expedition until the autumn. On the 4th of October, 1884, a force consisting of 10 guns, 561 sabres, and 4,220 bayonets assembled about Thal-Chotiáli under the command of Brigadier-General Sir O. V. Tanner, K.C.B., and moved into the Bori valley, where Sir Robert Sandeman, K.C.S.I., Agent to the Governor-General in Baluchistán who accompanied the force, received all the Bori headmen in a public darbar and they made full submission. A standing camp was then formed at Dulai. Overtures were now made by Shah Jahan. and Sardár Bai Khán, Sárangzai, was sent to bring him in but without success, nor did the Kibzais and Musa Khéls come in and tender their submission as was expected. The force accordingly marched to Akhtarzai on the 21st of October and Shah Jahan's fort which lay 6 miles to the north was occupied on the following day. The enemy, who were said to number from four to five hundred, had occupied the hills north of the camp, and they were attacked on the morning of the 24th of October, and in two hours the position was captured, the enemy's loss being upward of fifty killed and some prisoners; five of our men were wounded. On the 26th of October, 1884, the force marched to Kila Saifulla Khán, the towers of which as well as of the villages of Shán Jahan and Dost Muhammad were blown up. Shah Jahan fled into the northern hills. On the 29th of October the force marched to Kanha. By the 31st of October, every chief of note in Zhob, with the exception of Shah Jahan,

Saintile, and one or two who had fled, or who resided at a History.

distance, had come in and tendered their submission. . Shahbaz Khan. Shah Jahan's cousin, who was by descent the head of the Jogizai family, but whose authority was overshadowed by the superior influence of Shah Jahan, had also come in and made submission. Some of the headmen of the Khoidádzai Kákars in the direction of Hindubágh still remaining obdurate, a force was sent against them which blew up Bisharat Kila and captured Bisharat himself. the son-in-law of Shah Jahan. On the 2nd of November. 1884, Sir Robert Sandeman came to a satisfactory settlement with the Zhobwals and the force proceeded to Mina Bázár, which was reached on the 9th. The Kibzai headmen then submitted, and on the 13th some of the troops were ordered back to Dulai, and with the remainder the General proceeded to Músa Khél Sahara, arriving there on the 16th of November. All the Musa Khel headmen submitted and the force marched back to Nálai near Mékhtar on the 19th. The objects of the expedition having been accomplished, the troops were withdrawn with the exception of a garrison left at Thal-Chotiáli. With the sanction of the Government of India, Shahbaz Khan was nominated as the Sardar and Ruler of Zhob, and all the leading men, with the exception of the fugitive Shah Jahan and his family and one or two others, promised to assist him in his work and to put a stop to further raids on the Thal-Chotiáli District, and hostages were given to secure this object.

The settlement come to with the Kákars, besides imposing a heavy fine, included an agreement that the Government of India should be at liberty to station troops in Zhob and Bori, should it deem this advisable, and the following year, when it was decided that a frontier road should be constructed from Déra Gházi Khán to Pishín, it was also decided that the Bori valley should be occupied, and the cantonment from Duki was accordingly

^{*} Shahbas Khan, son of Rashid, grandson of Ishak Jogizai.

moved forward in 1886 to Loralai and a military post was stationed at Sanjáwi.

Murder of Sháhmár Khán, 1885.

Before this had taken place a private quarrel broke . out among the Jogizais, which eventually led to the formal submission of Shah Jahan and his family and to their conversion from enemies into friends of the British Government. In the month of August, 1885. Sháhmár Khán, the brother of Shahbáz Khán, who, with Bangul Khán, son of Dost Muhammad, were among the hostages given by the Jogizai sardárs, was sent with Bangul to Sanjáwi in connection with a tribal case. Here Bangul Khán, looking upon Sháhmár as the only strong man on the side of Shahbaz Khan, as indeed he was, took the opportunity to murder him during the night and fled to Zhob intending to murder Shahbaz Khan also, and then usurp the chief power in Zhob. Fortunately the Duki Native Assistant to the Agent to the Governor-General, Khán Bahádur Hak Nawaz Khán, succeeded in warning Sardár Shahbáz Khán in time, and Bangul Khan's plot was frustrated and he was obliged to fleeto the hills north of Zhob. Sardár Shahbáz Khán seized this opportunity to make overtures to Shah Jahan and his son, Shingul Khán, who were hostile to Dost Muhammad and Bangul, and shortly afterwards Shingul Khán came in and tendered his submission to the Agent to the Governor-General at Quetta, and Shah Jahan himself paid his respects to Sir Robert Sandeman at Sibi and promised to act for the future as a loyal ally of the British Government.

Dost Muhammad, 1887.

In the meantime Dost Muhammad, a dissipated and violent-tempered man, succeeded in collecting a band of followers both from Zhob and Bori, and commenced a life of plunder and outrage. At first Dost Muhammad's attacks were confined chiefly to Zhob, but afterwards, with the assistance of Sultan Muhammad, one of the maliks of Mina Bázár, he established himself in Mina

Braza and was thus enabled to extend his operations into HISTORY the Bori valley, and even beyond it. Young men of fanatical spirit, or those who fancied they had griovances against their maliks, etc., left their homes and joined the robber band, and the well-disposed people of Zhob were unable to impose any check upon their unlawful proceedings. The construction of the frontier road through the Bori valley, and the consequent influx of Hindustáni and Punjabi coolies gave opportunities to the followers of Dost Muhammad, and many outrages were committed. Towards the close of the year 1887. Dost Muhammad commenced plundering the Mando Khéls and tribes in the neighbourhood of Mina Bázár. They appealed to Umar Khán, the chief malik of the large Abdullazai section of Kákars and the most influential man in Lower Zhob, and he assembled a force and compelled the Pakhézais * of Mína Bázár to turn Dost Muhammad out of that place. Dost Muhammad accordingly retired to the hills to the north, where his son Bangul had remained ever since his flight. Sultan Muhammad, however, remained in Mina Bázár with his followers, and the outrages in Bori continued, Umar Khán not concerning himself with anything but the protection of his own interests. Sultan Muhammad venturing into Murgha was seized by the Kibzai chiefs there and handed over to the authorities at Loralai. Even this, however, did not put a stop to the bad conduct of the Mina Bázár people, and it was determined to pay the place a visit to punish those guilty and obtain security for good conduct in future. Accordingly Sir Robert Sandeman, Sir Robert after accompanying His Excellency the Commander-in-Chief in India along the new frontier road in 1888, Apozai, 1888. marched, with his escort slightly strengthened, towards Murgha through the Músa Khél country, and thence to

Sandeman's march to

Pakhézai, a sub-section of the Abdullazais (population in 1901: 763 persons, adult males 227).

Mína Bázár, when all the Abdullazai and Pakhézai malika tendered their submission with the single exception of the chief, Umar Khán, who, whether on account of his. fears or desirous of making himself looked upon as an important person, held aloof. Packing up all his goods. Umar Khán started to flee towards the northern hills, but was pursued by the Political Agent and captured with Submission all his family after an exciting chase. While at Mina of the Mando Bázár, settling the various cases against the delinquents,

the Mando Khél chief, Malik Khánán Khán, came in to the Agent to the Governor-General's camp and invited him to visit one of their chief villages, Apozai. Sir Robert Sandeman accordingly marched to Apozai, about 25 miles from Mina Bázár, and halted there for three days, when the Mando Khéls presented a petition to be taken under British protection and offered to pay any revenue Submission in return, which might be decided upon. Sir Robert

Kákars.

of the Zhob Sandeman returned by the Central Zhob route and was met at Gwal Haidarzai by his old enemy and friend Sháh Jahán with all his family. Here Sháh Jahán and his leading maliks also presented him with a petition. praying that as they were unable to manage to keep peace and maintain order, the British Government might be pleased to take them under its protection and that they were willing to pay revenue in return.

Occupation of Zhob, 1889.

Hitherto our dealings with the Zhobs had been carried out entirely with the desire of keeping order on the frontier, but the visit to Apozai demonstrated the great importance of the Zhob valley from a military and strategic point of view. It was clear that it not only turned the whole of the difficult country about the Takht-i-Sulaiman and dominated the tribes occupying this range and the numerous passes through it to the south, but also flanked the great Gomal caravan route to Ghazni and Kandahar. Moreover, it was becoming more and more evident that, even with a view to the tranquillity

of our frontier, the half measures hitherto adopted were MISTORY. insufficient. In the summer of 1889 an old quarrel broke out afresh between two* of the most important tribes of Upper Zhob which if left to itself would have led to fresh complications. The Officiating Agent to the Governor-General. Sir H. N. D. Prendergast, K. C. B., V. C., himself marched to the spot, and after considerable trouble arrangements were made to settle the feud. It was apparent that without some central authority on the spot to enforce obedience to law, the quarrels of the Zhobis would lead to perpetual disturbances, which must injuriously affect our frontier district and the military communications, such as the Frontier Road. It was, therefore, decided by the Government of India to accept the offer of the people and occupy Zhob, and at the same time to open the Gomal route, so as to render it practicable for communication with Afghánistán. Mr. R. I. Bruce, C. I. E., Deputy Commissioner of Déra Ismáil Khán, was placed under the orders of the Agent to the Governor-General for the purpose of dealing with the tribes having political relations with the Punjab, namely, the Shiranis and Wazirs, and he joined the Agent to the Governor-General at Loralai on the 18th of December, 1889. The expedition which comprised the troops noted in the margin*

* 470 Sabres, 6th Bengal Cavalry; 500 Bayonets, 23rd Pioneers; No. 3 Peaháwar Mountain Battery. under the command of Colonel Jennings, 6th Bengal Cavalry, marched

from Loralai on the 19th of December and reached Apozai on the 26th.

Some distance short of Apozai the expedition was met by Umar Khán, the chief of the Abdullazais, and a little further on by a deputation of the Mando Khél maliks, headed by Akhtar Khán and Akram Khán, the nephew and son of Khánán Khán. They reported Khánán Khán's death two days previously, and Akhtar Khán presented a written document addressed to Sir Robert Sandeman in which

^{*} Mirssi and Khoedadsai Sangar Khél Kakara.

Khánán Khán had expressed his pleasure at his coming to occupy Zhob, his regret at having no hopes of seeing the Agent to the Governor-General, and recommending to. Sir Robert Sandeman's care his sons and family who would be entirely at his service and disposal. A darbár was held at Apozai, which was attended by Sardár Shíngul Khán, son of Sháh Jahán, and by all the chief maliks of Zhob, including the Abdullazais and Mando Khóls, in which the objects of the mission were explained, namely, that Government had listened to their request and had decided to establish in Zhob the same reign of peace and order as elsewhere in Baluchistán, and to guard them from being raided, as they had been in the past, by their neighbours, the Shíránis and Wazírs.

During the next few days a site was selected for a cantonment about 2 miles from the village of Apozai, which cantonment was afterwards appropriately named "Fort Sandeman"; work was undertaken to improve the water supply, and the Superintending Engineer, who had accompanied the Mission, commenced the laying out of a road to the Gomal. In the meantime the Deputy Commissioner. Dóra Ismáil Khán, had sent messengers to summon the jirgas of the Shíránis, Haripál, Mahsúd and Zalli Khél Wazirs, and the Dotánis; and Captain MacIvor, who had been appointed the first Political Agent of Zhob, distributed the service of Rs. 25,000 per annum sanctioned by the Government of India for the Mando Khels. As there was some delay in the coming in of the jirgas summoned by Mr. Bruce, the opportunity was taken to visit the country to the north-west towards the Kundar river. Lioutenant-Colonel Holdich, R. E., accompanied by Captain MacIvor and Lieutenant Mackenzie, R.E., succeeded in reaching the Kundar at the spot where the Gustoi stream joins that river. In the meantime the jirgas of Mahsuds, etc., had come in, and matters were arranged with them successfully. The only tribe that did not come in was the Largha division of

the Shiranis, who live on the eastern slopes of the Sulaiman History. range. A separate settlement was, therefore, concluded with the Bargha division, who were placed under the charge of the Political Agent, Zhob. All these arrangements being complete, the Political Agent, Zhob, with a small garrison, was left at Apozai, and the Agent to the Governor-General, with the remainder of the expedition started on the 22nd of January, 1890, for the Gomal pass.

Relations with the Jogizai family after the

Since the occupation of Zhob, relations with the Jogízai Sardárs had been of the most amicable nature, except in atter the occupation of the case of Dost Muhammad and his son Bangul. Sardár Shahbaz Khan, Shah Jahan, and others, through their working representative Sardár Shingul Khán, gave loyal and willing assistance. Sardár Dost Muhammad and Bangul, however, held aloof and from their strongholds in the mountains north of the Zhob valley, continued to harry the Kákar tribes who had submitted to us and to give refuge to all the outlaws and malcontents who flocked to them. Opportunity was taken of the movement of troops from Quetta to Apozai for the Shirani expedition in November. 1890, to explore the country lying to the north of the main Zhob valley and to endeavour to capture Dost Muhammad and Bangul with their band of outlaws. The troops under General Sir George White, K.C.S.I., V.C., accompanied by Sir Robert Sandeman, marched through the country in two columns. Bangul deserted his stronghold at Tánishpa which was blown up and an engagement was entered into by the Shahézai and other sections of the Julalzais of the Khaisora valley and Tanishpa and by the Mardanzais, in which they engaged not to permit the outlaws to return to Tánishpa. Bangul and Dost Muhammad on being thus driven across the Kundar, took up their abode for various periods at Pálézgír, Sáleh Káréz, Málkand, and elsewhere in the trans-Kundar Kákar country. From thence their followers on numerous occasions crossed the Kundar and committed robberies and outrages in Zhob. In 1892

Major MacIvor visited the trans-Kundar Kákar country and though the attempts to capture these men proved unsuccessful, his mission brought about extremely beneficial results.. Dost Muhammad and Bangul were obliged to retire from Kákar limits and to take refuge in Afghan territory; and the Kákar tribes trans-Kundar clearly recognised for the first time that they were British subjects. In September. 1892, Dost Muhammad with his two younger sons came in and gave himself up to the Political Agent, Zhob, though his eldest son Bangul beld on. The opportunity of Dost' Muhammad's return was taken to settle the case of Shahmar's murder by Bangul in 1885 already referred to. The case was placed before a jirga at Fort Sandeman and a settlement was arrived at on the 18th of November, 1892, the bloodmoney being fixed at Rs. 5,000.

Murder of Sardár Shin-(Nawáb Kahol).

The settlement gave satisfaction to both parties and was approved of by Sháhmár's eldest son, Dínak. To celebrate gal, son of approved of by Shanmar by Shah Jahan the close of this longstanding feud, Major MacIvor gave a feast the same evening. During this feast a lamentable occurrence took place which more than undid all the good results of the settlement. Dinak, a youth of some 20 years, who had always been known as a boy of weak intellect. suddenly got up and with his father's sword, a weapon of well-known history, which had only that day been restored to him as part of the settlement of the case. attacked Sardár Shingul and dealt him two heavy blows on the arm which proved fatal. No satisfactory reason could be shown for this hostility on Dinak's part, and a suspicion arose that he had been made a tool of by Sardár Dost Muhammad and Malik Sultán Muhammad Pakhézai. case was placed before the Sibi jirga in February, 1898. and the members of the jirga, though finding no actual proof of instigation on Dost Muhammad's part in Shingul's murder, considered the grounds of suspicion against him so strong that they recommended his and Sultán Muhammad's detention at Quetta. Dinak was sentenced by

Major MacIvor to transportation for life and Sardár Muham- History, mad Akbar. eldest son of Sardár Shingul, was appointed Sardár of Zhob; the title of Sardár Bahádur was subsequently conferred upon him in 1857.

Bangal Khán at the beginning of 1893 was living with Submission the Tokhí Ghilzais at Jabbár Kila in Afghán territory. The capture of the notorious outlaw Gola and four others and the punishment of death awarded to Gola for numerous murderous outrages, produced a strong effect on the minds of Bangul and his followers. Bangul had also received orders from His Highness the Amír either to come to Kábul or leave Afghan territory and was thus compelled to choose between exile in Afghánistán or throwing himself on the mercy of the British Government. The deaths of Sardárs Sháh Jahán and Shíngul Khán in 1892, and of Sardárs Shahbaz Khan and Nur Muhammad in 1893, probably also had some share in determining Bangul's decision since no men of any weight remained in Zhob, except the young Sardár Muhammad Akbar Khán; and Sardár Shahbáz Khán's eldest son, Zarghún Khán, was only ten years of age. When, therefore, Lieutenant A. H. (now Sir Henry) McMahon, then Political Agent in Zhob, sent Bangul a letter placing before him the hopelessness of his position and strongly advising him to come in and throw himself on the mercy of Government, Bangul and his followers left Afghan territory, and came to Hindubágh where, on the 24th of June, 1898, they surrendered themselves unconditionally to Lieutenant McMahon. Bangul's offences rendered him liable to be severely dealt with. There were, however, a number of extenuating circumstances in his case. These, and the completeness and evident good faith of his surrender, decided Government to deal leniently with him. The Agent to the Governor-General therefore received Bangul's submission in darbar at Ziarat and accorded. him forgiveness for his past offences, on condition of adequate security being furnished by him and by his

of Bangul

father, Dost Muhammad, for their future good behaviour and non-interference in the affairs of the Jogizai family. After this Bangul Khan proved himself a valuable servant of Government. Later on an allowance and a revenue-free grant of land were conferred upon him. In January, 1894, Bangul Khán and other Sardárs were taken on a tour round India and visited among other places Lahore, Calcutta, Bombay, and Karáchi. The tour was very successful and had a salutary effect on the minds of the chiefs. He accompanied Sir Henry McMahon during the Afghán Baloch Boundary demarcation in 1894-95 and again on the Seistán Arbitration Commission in 1903-05 and did good service. He was made a Sardár Bahádur in 1897 and Nawab in 1906. But unfortunately in May, 1906, in an affray in which his son, Zaríf Khán, was concerned and in which Muhammad Akbar was wounded by Zarif Khan, Bangul was shot at Kila Saifulla and died the same evening. The case is still (1906) under enquiry.

Administra-

Upon the formation of the Zhob Political Agency in tive arrange- 1890. the newest tabsils of the Thal-Chotiáli Agency, namely, Bori, Sanjáwi, and Bárkhán were transferred to Zhob, with the exception of the Loralai cantonment and station, which remained as the head quarters of the Thal-Chotiáli District. Thus the new Agency included Bori. Bárkhán, Sanjáwi, the Zhob country proper, including the Mando Khéls, and the Kibzai and Músa Khél countries. The Bargha Shíráni and Haripál country, that of the Jáfar Patháns and Kharshins at Drug, and the Zmarai, Isot. Marghazán, and Bulfarz countries were subsequently added to the District. A Political Agent was placed in charge, with an Assistant Political Agent and two Native Assistants or Extra Assistant Commissioners; the Assistant Political Agent, besides his ordinary duties, was put in responsible charge of all the levies and police of the District. In 1895 a second Assistant Political Agent was added and placed in charge of the Upper Zhob sub-division.

In 1890 the formation of the Zhob Levy Corps was sanctioned, RISTORY. and Captain W. A. D. O'Mealy, 1st Punjab Cavalry, was selected as its first Commandant. A brief account of the Corps is given in Chapter III. Sanjáwi was re-transferred to Thal-Chotiáli in February, 1891, Bárkhán in April, 1892, and in January, 1894, the Loralai cantonment and station were handed over to Zhob. In October, 1903, the new Loralai District was formed to which were transferred the Bori, and Músa Khél tahsíls of the Zhob District. The Assistant Political Agent in charge of Upper Zhob was at the same time transferred to the Loralai District. In the same year the necessity for an additional British Police Officer was brought to the notice of the Government of India and it was proposed to appoint an Assistant District Superintendent of Police for the Districts of Loralai and Zhob. Pending final decision of the Government of India. the Honorary Assistant District Superintendent of Police of the Sibi District was deputed in December, 1903, to take charge of these Districts and to report on the general working of the police; the Assistant Political Agent at Fort Sandeman being relieved of the police work. This temporary arrangement is still in force (1905). The separation of the Zhob from the Loralsi police force was proposed in 1905, the withdrawal of various military detachments at sub-treasuries and elsewhere and their replacement by Police and Levies being also suggested.

The chief political event of the year 1892 was the advance made by His Highness the Amír's officials in the direction of events, 1892. the District. On the 31st of January, 1892, Saifulla Khan. Governor of Katawaz, and Mansur Khan, Governor of Mukur. with about 120 sowars and khásadárs arrived suddenly at Gulkach, having marched from Katawas down the Gomal river. The two Governors, after visiting Girdao, Sri Toi, and other places, went back to Kábul leaving a small outpost at Gulkach on the north bank of the Gomal river, which was subsequently relieved by about 50 khásadárs under

Important

Yusaf Ali Khán, a brother of Mansar Khán. In view of these proceedings, it was decided to carry out the intended occupation of Gulkach on the south of the Gomal and this post was accordingly held by a detachment of the Zhob Levy Corps. Much excitement was caused in the District both by these proceedings and by the arrival at Wáno and Zarmelán of detachments of Afghán troops. Their presence gave rise to exaggerated rumours relative to the Amír's attitude towards the British Government. This feeling was increased by the movement in July, 1892, of another party of the Amír's men under Sardár Gul Muhammad to Gustoi within the Zhob District. Major MacIvor, however, lost no time in proceeding to Gustoi with a small escort of troops and levies and on his approach the Amír's men withdrew.

The year 1895 was characterised by an outbreak on the part of the Chúhar Khél Shíránis. Owing to a dispute with the Khidderzais over the matter of the abduction of a woman, they committed in June, 1895, a series of murders including Lieutenant Home, R. E., the officer in charge of the construction of the Dahánasar road. The gang were pursued but succeeded in effecting their escape through the Shíráni hills into Afghán territory, though one of their number was captured in the following November, sentenced to death and executed.

The following Officers have held the appointment of Political Agent:—

Captain I. MacIvor, B. A., C. E., 22nd of January, 1890, to 14th of March, 1893.

Major C. E. Yate, C. S. I., C. M. G., to 1st of April, 1893.

Lieutenant A. McConaghey to 17th of April, 1893.

Captain A. H. McMahon, C. I. E., to 21st of August, 1893.

Lieutenant A. McConaghey to 24th of January, 1894. Captain C. Archer to 24th of August, 1896. Captain P. T. Spence to 18th of November, 1896. Captain C. Archer to 21st of December, 1897.

HISTORY.

Mounds.

· Captain F. Macdonald to 18th of September, 1898. Captain H. L. Showers to 5th of November, 1898. Captain F. Macdonald to 1st of May, 1899. Captain H. L. Showers to 20th of November, 1899. Captain F. Macdonald to 28th of March, 1901. Major S. H. Godfrey to 26th of October, 1902. Captain A. B. Dew to 17th of May, 1903. Captain A. L. Jacob to 5th of June, 1903.

Lt.-Col. G. Chenevix-Trench to 31st of March, 1906.

The only objects of any archeological interest to be Aroneology found in the District, are a number of mounds which are said to be the ruins of old cities or forts and are ascribed to the time of the Mughals. Ruins of old buildings are situated at Kodan (Sharghala) near Malawar, 7 miles to the west of Fort Sandeman. Near Jhalár, 9 miles to the west of the same station, exist other ruins known as Maghlia ghundi, and hence ascribed to the Mughals. A mound situated in Mina Bázár and another called Kánroki more to the west on the bank of the Zhob river are alleged to date from Nádir Sháh's time. A mound known as the Dérai lies 3 or 4 miles from Fort Sandeman on the right bank of the Zhob river. Another similar mound called Kabdanai is situated 2 or 3 miles further north. Near the Déra village about 7 miles north-west of Fort Sandeman exists a third mound called Sáng. All these are alleged to be the ruins of ancient Mughal towns.

The ruins of an old fort called Mughalo kila or "the Old forts. fort of the Mughals" are to be found to the west of the Kárézgai village, 2 miles from Hindubágh, below which there is a spring of water which was re-opened about 35 years ago. Fragments of ancient pottery are found in these ruins, and it is said that old silver and copper coins used also to be found. The ruins of a fort called Khánki lie near Shina Khura about 16 miles east of Hindubagh.

Local tradition asserts that the fort was held by Miro, a Mughal governor, and was miraculously overthrown by Sanzar Nika, the progenitor of the Sanzar Khél Kákars. There are also ruins of an old fort called the Mughalo bruni about 800 yards from the Murgha Fakirzai Rest House.

Similar ruins occur near Toiwar, Sharan, Ismáilzai, and on the Zhar hill near Akhtarzai Rest House.

Old Karters

There also exist ancient kárézes said to have been made in Mughal times, for instance, Káréz Akhtarzai, Káréz Soghai, and Mustafa Káréz in the Kila Saifulla tahsíl and 2 kárézes in Sra Khulla, about 4 miles from Hindubágh. which may be considered as relics of archeological interest.

Band-i-Dawi. This dam is said to have been constructed by the Dawi tribe in the reign of Nádir Sháh and is situated at Kuria Wasta between Káréz Kamr-ud-dín and Késhatu: an account of it will be found in Chapter II.

Old coins.

The only important find unearthed in the District is referred to by Professor Rapson of the British Museum in his pamphlet,* "Ancient Silver Coins from Baluchistán," and the passage may be quoted here in extenso:-

"In February of the present year I received from Mr. Hughes-Buller fifteen specimens of the so-called 'punch-marked' coins of India. These were found in a pot by some boys near the village of Aghbarg, in the Shíráni country of the Zhob District. These punch-marked coins represent the primitive currency of India. They are little more than square or oblong weights of silver stamped with symbols, which are probably mostly those of different bankers or money changers, who had from time to time satisfied themselves of their correctness in weight, or of the quality of their metal. They date from at least the fourth century B. C., and may be earlier; and they remained in circulation for different periods in different parts of They have been found throughout India from the India.

^{*} Reprinted from the Numismatic Chronicle, Fourth Series, Vol. IV. London, 1904, page 3, et seq.

Himalayas to Cape Comorin but it is new and interesting to find them in Baluchistán."

"The special interest in the Afghans for Baluchistan lies POPULATION.

Rthnograin the fact that the traditional home of the race lies within phical history. its boundaries. Afghán genealogies, whatever be their value, all commence from Qais Abdur Rashid, who is alleged to be thirty-seventh in descent from Malik Tálút (King Saul). His home was in the tract immediately to the west of the Koh-i-Sulaimán, which is known to the Afgháns as Khorásán and to us as Kákar Khorásán. From Qais Abdur Rashid sprang three sons, Ghurghusht, Saraban, and Baitan, and the descendants of these eponymous ancestors are still to be found living in large numbers round the slopes of the Takht-i-Sulaimán. From Ghurghusht. according to the genealogists, were descended three sons, Mando, Bábi, and Dáni. The descendants of Mando are represented by the Mando Khéls of Zhob. We have a few Bábis in Quetta-Pishín and Kalát, and although Dáni has not become the eponym of a tribe, his descendants constitute two of the most important tribes of the Province, namely, the Kákars and the Pannis. * * Saraban's descendants divide themselves into two groups, whose ancestors were his two sons, Khair-ud-dín alias Kharshabún and Sharf-nd-din alias Sharkhabun. Kharshabún's immediate descendants are represented by the Zamands, a few of whom are to be found in Pishin, and the Kasis, who live close round Quetta. The rest of the descendants of Kharshabun are the Yusufzais, the Tarkalanri, and the Utmán Khél, the main body of whom are to be found in Dír, Swát, and Bajaur, whilst a few are said to have amalgamated with the Dehwars of Mastung. Among the Yúsufzais of Swát the tradition exists that they migrated from Ghwara Murgha in Khorásán, and a curious verification of this statement was obtained by Major (Sir Henry) McMahon, while marching along the Kundar river, which leads from Khorásán into the Gomal. At one of his halting

POPULATION. places, Gustoi, he discovered remains which appeared to be those of a walled encampment of considerable extent, and enquiries from the local inhabitants, to whom the existence, of the Yúsufzais of Swát was unknown, elicited the fact that, according to their traditions, the old encampment had been held by a tribe called Yúsufzai.

"The descendants of Sharkhabán, Saraban's other son, were five in number—Tarín, Shíráni, Miáni, Baréch, and Urmar. Tarín, Shíráni, and Baréch are at once identifiable as the names of important tribes still to be found in Baluchistán. It is only among the Marris that the name Miáni can be localised, where they constitute only a small group, but other representative descendants of this grandson of Saraban are the Lúuis of Thal-Chotiáli, amalgamated with whom are to be found the descendants of another son of Miáni, the Laths; the Júfars of the Músa Khél tahsíl * of Zhob; the Silách, who are to be found among the Hasni section of the Khetrán tribe, the Zmarais, and the Bulfarz or Bulfarth section of the Isot tribe.

"Few of the descendants of Baitan have their homes in this Province, but many of them re-visit the homes of their ancestors in the course of their annual migrations. I refer to the numerous nomad sub-divisions of the Ghilzais—the Sulaimán Khéle, Násars, Kharotis, and others. Close to our borders, across the Gomal, the name of the common ancestor can still be localised in the Baitanis of the Déra Ismáil Khán District."

According to local tradition almost all the present Afghán tribes of the Zhob District allege that they supplanted the Mughals in the time of Sanzar Nika, the progenitor of the Sanzar Khél Kákars, who was fifth in descent from Qais Abdur Rashíd; that they were primarily pastoral, but gradually began to till the land. The exist-

^{*} Now in the Loralai District (1906).

[†] Census of India, 1901, Volumes V and V-A, Baluchistan, Chapter VIII, by R. Hughes-Buller, I. C. S.

ence of ruins of old forts, villages, and underground water POPULATION. channels called after the Mughals corroborates the local etradition. The Bargha Shiránis and the Khosti Saiads are said to have been recent immigrants, the former having moved from the country east of the Sulaiman range some three hundred years ago.

The first regular census of the District, the results of Density and which have been published, was carried out in 1901. The District was divided into three divisions for the purpose-(a) the head quarter stations, bazars, and military outposts in which a synchronous enumeration was made on the standard schedule; (b) the tribal area, i.e., the country occupied by the Sulaimán Khéls in which estimates were prepared through the headmen of the tribe; and (c) the remainder of the District in which a rough house to house enumeration was made by the subordinate revenue staff. This was not synchronous. The results arrived at gave a total population of 69,718, of which 5,152 were censused on the standard schedule, and represent, in the main, the nonindigenous population of the District. A detailed statement containing the principal census statistics will be found in table II, Volume B.

No previous figures are available to afford comparison and to illustrate the growth of population, but it may be assumed that the greater security to life which has attended the British occupation, and the rise in the standard of living has led to more frequent marriages and a consequent increase in the birth rate. It may be mentioned that in 1890 the number of fighting men of the Hasan Khél, Oba Khél, and Chúhar Khél clans of the Bargha Shíránis was computed at 540, while in 1901 the number of adult males of these clans was found to be 967.

According to the census of 1901, the total number of occupied houses in the District was 15,557; 1,061 in towns and 14.496 in the villages. Of the total population of

growth.

POPULATION. 69,718* the urban part numbered 8,552 and the rural portion 66,166. The incidence of population per square mile is 7, the highest being 9 in the Fort Sandeman tahsil and the lowest 5 in the Hindubagh tahsil. The population per house in the urban area is 3.3 and in the rural area 4.5

Towns ar

The only town in the District is Fort Sandeman which has grown up since the British occupation in 1890 and is inhabited largely by an alien population.

In pre-British days, the number of villages was smaller, the people being obliged to live together for offensive and defensive purposes. There is now a tendency to spread out, and new villages and hamlets are gradually springing up. Since the British occupation, 69 new villages and hamlets have been established in the District: 38 in Hindubágh, 21 in Fort Sandeman, and 10 in the Kila Saifulla tahsíl. The District possessed a total of 245 villages in 1901, in an area of 9,626 square miles or one village in every 39 square miles. Fort Sandeman has one village in 33 miles, Hindubágh one in 43 miles, and Kila Saifulla one in 46 miles. There are few villages which have a population of over 1,000 souls. The most important places are mentioned in Chapter IV in the Miniature Gazetteer of each tahsíl.

Migration.

As in other parts of Baluchistán, a continuous flow of migration is constantly going on, the causes being the nomadic habits of some of the tribes, the variations in the climate, and trade. The Sargara flockowners of Hindubágh spend their winter in the Duki and Boritahsíls, the Isa Khél Sanatia, and the Mazársai, Gházezai and Asozai Mehterzais move to the Kárézát-i-Kákari and Surkháb circles in Pishín, while the Mírzai, Khoidádzai, Mardánzai, Fakírzai and Macharzai Sanzar Khél flockowners spend the summer in Kákar Khurásán. Similarly the flockowners of the Kila

This figure does not include the population of Loralai and Missa Khel tahalis which formed part of Zhob District in 1901, and which are now included in the Loralai District.

Saifulla tahail migrate to Khurasan in the spring and return Population. in the autumn, and the Sulaimanzai section of the Mando Khéls and Huramzai and Mardánzai Sanzar Khéls graze their flocks from September to March in the Spéra-ghar and Sáng-ghar hills and from April to August in Khurúsán. The poor among the people of Hindubágh migrate after the rabi sowing to Pishin and Quetta, those of Kila Saifulla to Bori and Fort Sandeman where they work as labourers. returning home about the end of May when the rabi harvest is ready. Most of the tribesmen who are engaged in agriculture live in winter in their huts, and in summer are scattered about their fields or move to the nearer hills.

The majority of the Haripáls (males 833) and some of the Bábars, Bargha Shíránis, Mando Khéls and Kibzais of for trade. the Fort Sandeman tahsil regularly leave their country in April, visit Siáhband, Herát, and Maimana where they spend three months in collecting the asafætida drug, and return home in October, the journey each way occupying about two months. Some of them take the drug for sale to Déra Ismáil Khán, and go as far as Bombay in the south and Cawnpore in the north of India. A few of them also visit the Zarghún hills in the Sháhrig tahsíl of the Sibi District, and the Western Sanjráni country to collect asafætida. A considerable number of the Kibzai, Abdullazai, Mando Khél and Bábar periodically visit Kandahár, Herát and Turkistán where they spend two to three years and deal in sheep and postins.

The periodic immigrants into the District are the Taraki, Andar, Kharot, Shinwar, Mala Khél, Nasar, Mia Khél, immigration. Sulaimán Khél and Dotáni clans of the Ghilzais. Of these, the Taraki, Andar, Kharot, and Mala Khels are chiefly flockowners who enter the District by passes between Kamr-ud-dín Káréz and Késhatu. Some go towards Pishin and Shorawak, others graze their flocks in Hindubagh and Kila Saifulla and some go to Fort Sandeman. Some of them move on to Musa Khel, Duki, and Bori.

POPULATION.

The Mala Khél, Kharot and Mia-Khél, and Násars who own camels and carry on trade in wool, ghi, and almonds come through the passes east of Kamr-ud-din Karéz, between it and the Gomal and go to the Déraját in the winter, and some of them proceed as far as Calcutta where they engage in the cloth trade. The Mala Khél camelmen leave their families in daman and themselves spend the winter in the District and engage in transport work. Tho Zangi Khél section of the Násars, who own goats, live near Fort Sandeman from April to September and sell milk and graze their flocks in the dámán during winter. Sulaimán Khéls spend the winter in the Fort Sandeman tahsíl, and the Dotánis migrate to the District from Waziristan in October and graze their flocks throughout the These Ghilzai Powindahs generally come from Afghánistán during October to December, and return to their homes during April and May. A further account of them is given under the Ghilzai tribe,

Immigration from India. In 1901, 6,216 persons (5,601 males, 615 females) were enumerated in the old Zhob District (which then included also the Loralai and the Músa Khél tahsíls), as having been born in Provinces of India beyond Baluchistán, and 663 who had been born in Native States in India beyond Baluchistán. Countries adjacent to India chiefly Afghánistán had contributed 790 immigrants. These figures include the sepoys serving in Native Regiments.

The Province in India from which most immigrants come, is the Punjab (4,823), which is followed by the United Provinces (983). Sind and Bombay come next with 206 and 63, respectively. Of Native States those of Rájputána (304) and Punjab (173) supply the major portion. The immigrants from the Punjab are drawn principally from the Districts of Jhelum, Déra Ismáil Khán, Siálkot, Amritsar, Ráwalpindi, Gujranwála, Sháhpur, Gujrát, Ludhiána, Hoshiárpur, Jullundur, Pesháwar, Gurdáspur, and Déra Gházi Khán,

No record of age was attempted in 1901, except in the POPULATION. town of Fort Sandeman, and in the bazars and military Age statisoutposts which were enumerated on the standard schedule; tics, vital stain the District the only classification was adults and minors mortality and Out of a total indigenous population of 64.417, there were 21,018 adult males and 18,818 adult females. The number of children, 12 years and under, was males 13.840 and females 10.741. In the town of Fort Sandeman for which alone accurate figures are available, out of a total population of 3,552 (males 3,139, females 413) 2,338 males and 196 females or a total of 2,534 persons were between the ages of 20 and 40 years.

Vital statistics are not recorded in the District. 1905, a summary enquiry regarding the birth and death rate was made by the tahsil officials by selecting a few villages in each tabsil, the result obtained indicating 6.06 per cent. births and 5.73 per cent. deaths in the Fort Sandeman tahsil, and 5.67 per cent. births and 5 per cent. deaths in the Kila Saifulla tahsil, on the total population of those villages during the preceding 12 months. The birth and death rate in each tabail was as under-

	FORT SA	NDEMAN.	KILA SAIFULLA.		
	Births.	Deaths.	Births.	Deaths.	
Boys	8.64	1.98	8.17	1.07	
Girls	2.42	1.34	2.52	1.11	
Adult Males	•••	1.11	•••	1.60	
Adult Females		1.3		1.22	

The conditions in the Hindubagh tahsil are similar to those prevailing in Kila Saifulla.

The indigenous population, as a rule, are not long-lived owing to constant exposure and bad nutrition.

POPULATION.

The same summary enquiry, to which a reference has already been made, shows that of a population of 5,662 in the selected villages, the total number of afflicted, persons was 74 or 1.31 per cent., of which 54 were males and 20 females. These included 41 blind (29 males. 12 females) and 28 deaf and dumb.

Comparative number of the condition.

The disproportion of women to men in the Fort number of the Sandeman Bazar and military station was very great in 1901, as there were only 132 women to every thousand men.

> Among the rural population there were 29,668 women and 36,498 men or 813 women to every thousand men. Among the Kákar Afgháns, who form the major portion of the population the proportion of females to males was 850 to 1,000. The Mando Khéls had 879, Shíránis 890, the Saiads 935, and the Ghilzais 776 females to 1,000 males. No record was prepared in 1901 of the civil conditions of the indigenous population.

Marriage customs.

Among the indigenous classes every man marries as soon as he possibly can, but the necessity of paying brideprice (walvar) compels many to wait till middle age. This is specially the case with the poorer nomadic classes. Girls are rarely given in marriage till they have reached the age of puberty, one of the most important reasons being the heavy domestic duties which devolve on a wife and which can only be performed by a full grown woman.

So far as can be ascertained polygamy is rare, except among the well-to-do, though the people have no objection to a plurality of wives up to the limit of four prescribed by Muhammadan Law.

The summary enquiry instituted by the tahsil officials, to which a reference has already been made, elicited that in a population of 5,662, the number of married males was 1.246 or 22.4 per cent., of whom 223 or 4 per cent. only had more than one wife, the percentage being higher (4.51) in Kila Saifulla than (3.05) in Fort Sandeman. As a rule, only the wealthy can afford to take more wives than one, though

polygamy is occasionally forced on the poor among the POPULATION. Afghans by the custom which requires that one of the • surviving brothers or cousins must marry a widow.

Marriage with near relations, though not always the rule. is preferred, because exchanges can easily be arranged. the bride-price payable is less, the parties are already mutually acquainted and their tribal relations are strengthened by the marriage tie.

Among the well-to-do a man does not usually marry Marriage before the age of twenty; the bride is generally about four years younger. Among the poorer classes both the bridegroom and the bride are, as a rule, older. In rare cases infant betrothals take place, generally among very near relations. Ordinarily a man has nothing to say in the selection of his bride, but when his parents wish him to marry they look for a suitable girl, and the first step taken is to send a female relation to see her and to satisfy herself about her personal appearance and other qualifications. Among the very poor, or when marriage takes place among the well-to-do at an advanced age, the man makes his own choice. The girl having been approved, the father of the bridegroom with some of his relations (marakka) goes to the girl's father, and, if the preliminary overtures are well received, the amount of bride-price (walwar), the portion of it to be paid in cash and in kind, and the presents (kor). which the father will, at the wedding, give to his daughter. are discussed and settled. A deduction on account of the value of presents is sometimes made from the amount of walwar, and in such cases the parents make no presents to the daughter at the time of the wedding. When matters have been arranged, the mullá offers prayer (fáteh) and congratulations are offered to the bridegroom's father. The girl's mother then presents the bridegroom's father with a handkerchief or the collar of the girl's dress, and a needle in the eye of which has been inserted a silk thread. The bridegroom's father presents the bride with an ornament

ceremonies.

POPULATION. made of silver coins called zarungae. This is the distinctive sign of maidenhood and is not removed until the woman becomes a mother. Guns are then fired. This is the preliminary step in the betrothal and is known as the hokra or ghusht and it is binding, and after it has taken place, it is considered a want of good breeding on the man's part to retreat without a plausible excuse, and any one who does so is regarded with contempt. In the case of the woman the hokra is considered binding except under special circumstances,

such as adultery on her part or strong suspicion of it.

After about a month a party of the bridegroom's relations goes to the bride's father, and pays him a portion of the walwar. The bride's father presents embroidered cloth, pouches used for keeping antimony and tobacco in, and in the Kila Saifulla tahsil a paijāma string and the collar of the girl's dress. This is the kozda or betrothal, and at this time there are again general rejoicings, dancing, etc. After the kozda the bridegroom is permitted to visit the bride at her parents' house and enjoy all the privileges of a husband.

When the walwar has been fully paid, a date is fixed for the marriage (nikáh or wáda), when a party of the bridegroom's relations and friends (wra) go to the bride's house, and bring home the bride. The marriage service (nikúh) is performed by a mullá in the bridegroom's house within three days. Marriages are generally performed after the wheat harvest has been gathered in, but they are not celebrated during the month of Safar, the first ten days of Muharram, and the period intervening between the two Ids. Besides the walwar, the bridegroom has to supply provisions (khushai) to the father of the girl for the entertainment of the wedding guests. In the case of widow re-marriages no ceremonies except the nikáh are observed. A curious custom is that on the day of the marriage the elder brothers, if any, of the bride, out of shame, leave the village.

The ceremonies of marriage described above prevail POPULATION. among the Kákars of the Hindubágh tahsíl, but with a few local modifications, apply to other Afghan tribes of the District including the Khostis. Among the Sanatia Kákars of Hindubágh, after the kozda, the bridegroom presents the bride with a dress, a wrapper to her mother, and sweetmeats, all collectively known as jora, after which he visits the bride and enjoys all the privileges of a husband. If the girl becomes pregnant whilst in her father's house, the date of the marriage is expedited and the bridegroom is sometimes required to pay a penalty (sharmána) which varies from Rs. 30 to Rs. 40. The nikáh among the Sanatias is performed at the bride's house. Among the Mando Khéls, when a part of the walwar has been paid after the kozda, the bridegroom can visit the bride at her father's house. Among the Shiranis and Khostis, the bride and bridegroom are not permitted by custom to meet before the marriage ceremony (nikáh) has been performed. In the case of the bride's death before the marriage, the full amount of walwar paid is refunded among the Shiránis. while among other tribes only half of the sum paid is refunded.

The amount and method of payment of walwar is the most important factor in all matrimonial arrangements. In pre-British days money was scarce, and the bride price was low, varying from Rs. 30 to Rs. 50 for a virgin, and except the small amount required for ornaments, it was generally paid in sheep, goats, donkeys, camels, cattle, grain, or arms, and, occasionally, in land. The present rate of walwar among the Sanzar Khéls is from Rs. 200 to Rs. 700; among the Mando Khéls, from Rs. 300 to Rs. 500; among the Shíránis of Fort Sandeman, from Rs. 400 to Rs. 700; among the Khosti Saiads, from Rs. 300 to Rs. 700; and, among the Sargaras of Hindubágh, from Rs. 300 to Rs. 400. Among the Jogízai Sardár Khél of Kila Saifulla, the bride-price is about Rs. 1,000. But the amount

Bride-price.

POPULATION. depends on the position of the bride's family, her personal qualities, and the paying capacity, age, and social position of the suitor. If a man wishes to marry above him, or an old man wishes to marry a young girl, he has to pay a higher price than an ordinary suitor. The walwar paid for a widow is generally half the amount paid for a virgin. but, in exceptional cases, when a widow is young and attractive, it is more. Dower (haq-i-mahr), locally known as kawin prevails, and its amount varies according to the position of the parties. It consists of a camel, a head of cattle, or cash from Rs. 2-8 to Rs. 10. When animals are presented, the females are the sole property of the wife. while the males may be killed or disposed of by the husband without her consent. The husband also presents his wife. as dower, with a share, generally one-third, of the merit (sawáb), which he hopes to obtain after death by giving alms from his hearth (anghari) in his life time.

System of exchange.

A custom is also universal among the tribes of exchanging girls, and is called sarai or tsarai patsarai. Under this system, if there is much difference between the ages of the girls, which are to be exchanged, one being marriageable and the other not, the parents of the younger generally have to pay an additional sum (bardward or sar) in cash. Similarly an oldish man, who gets a young girl in exchange for one of his female relations, has to make an additional cash payment by way of compensation. This amount generally does not exceed one-fourth of the walwar prevalent among the tribes.

Ar system of marriage.

Among the Sanzar Khéls of the District, a system of marriage known as ar is also recognised. This was practised in pre-British days by men of power and influence only and there have been a few instances of it in recent years also. A man enamoured of a girl and refused her hand by her parents, would throw a sheep or goat's head into her house, fire a gun in front of the house, cut off her locks of hair, or ornament (zarungae), run away with her

wrapper (sarai or takrai) pronouncing at the same time POPULATION. that she was his, and no one else could dare to marry her. In due course her parents would be reconciled and the usual walwar paid. This system is now dving out.

The marriage expenses vary according to the position of Marriage the contracting parties, from Rs. 100 to Rs. 300, excluding expenses and the walwar; most of which fall on the bridegroom's party. The bride's parents generally present her with a dress and a few silver or brass ornaments, bedding, and some articles of household furniture. A suit of clothes is also given to the bridegroom. Wealthy and leading families present more dresses than one to the bride, and the ornaments and articles of household furniture are more numerous and better. When the value of the presents has been set off against the walwar, the bride seldom receives more than a wrapper from her parents.

The usual reasons for divorce are the disagreeable appearance or temper of the woman and immorality proved or suspected. The method of divorce is the throwing of three stones or clods of earth in the woman's lap, or, in her absence, in the lap of her father or brother in the presence of two witnesses. The divorced woman has the status of a widow, and can, among the Kákars, re-marry in her tribe, but, if she be divorced for misconduct, she is not permitted by custom in some of the tribes to marry her seducer.

Divorce.

A woman can obtain a divorce if her husband is proved to be impotent. To effect this, pressure is brought on the husband by her parents through the tribal headmen.

Among the Sanzar Khéls and Shíránis if the woman is divorced on account of disagreement, a part of the walwar is refunded to the husband, and among the Sanzar Khéls in cases of divorce for misconduct, the man who re-marries the divorcee has to pay a sum of money (khulla) to the husband.

Before the British occupation death was the punishment of Penalties for a faithless wife caught flagrante delicto, and among the Shiranis the seducer's right foot or nose was cut off. In case

adultery.

POPULATION. of misconduct on the part of a widow, her nose and ears were cut off. Theoretically death is still the punishment for adultery, but, in practice, an injured husband is ready to salve his conscience with compensation in girls, money, land, etc.; the amount payable varying in different tribes. No compensation is payable, if both the seducer and the woman are killed. If both escape, the woman is divorced and among the majority of the tribes the divorcee is allowed to marry her seducer on payment of compensation to the injured husband. There is no fixed rate of compensation, it being determined on the merits of each case. Among the Sanzar Khéls, Sargaras, and Mando Khéls the ordinary rate is 2 to 4 girls and Rs. 1,200, and in rare cases women are exchanged, the seducer handing over his wife to the injured husband; among the Shíránis it is Rs 700; among the Khosti Saiads it equals the amount of walwar.

The status of women and rights to property.

Women occupy a very degraded position in the household. As soon as a girl is fit for work, her parents send her to tend the cattle, besides requiring her to take her part in all the ordinary household duties. When she attains a marriageable age, she is, for all practical purposes, put up for sale to the highest bidder. As a wife she must not only carry water, prepare food and attend to all ordinary duties, but she must take the flocks out to graze, groom her husband's horse and assist in the cultivation. With a few exceptions mentioned later, she has no rights improperty, nor even to any presents given her at her marriage, and, if divorced, she can only carry away with her the clothes she is wearing. As a widow, too, she is only cutitled to a subsistence allowance from her late husband's estate. In the household of a deceased Afghán, widows and girls are merely regarded as assets in the division of his property.

In former days, a brother who did not wish to marry his brother's widow himself, could dispose of her in marriage to any one he chose and appropriate the walwar, but an approciable change has occurred in the position of such widows,

since an important decision given by Mr. (Sir Hugh) POPULATION, Barnes, then Agent to the Governor-General, in November, 4892, in the case of Lukman Kakar versus the Crown.

"As regards a widow's power of chosing a husband," Mr. Barnes said, "Muhammadan Law must not be over-ridden by local inhuman and ignorant custom, and, in all disputes regarding widow re-marriage brought before the Courts in British Baluchistán or the Agency territories, the Courts of Law should follow the provisions of Muhammadan Law, in so far as that Law gives to widows full liberty and discretion to marry whom they please; and no case of the kind should be committed to a jirga for settlement without a clear direction that, on this point of the widow's freedom of choice, no curtailment whatever will be permitted of the liberty and discretion which Muhammadan Law allows her. The only point in which any concession to local tribal custom can bepermitted, is that which relates to the payment which should be made by the new husband to the late husband's family. • • In order to put a stop to the feuds which might otherwise arise from allowing widows to marry whom they please, it is admissible for Courts to settle the sum of money which should be paid to the family of the widow's late husband by the man she proposes to marry. This is the point in the settlement of these cases, which may usefully be made over to a jirga for decision." This decision was re-affirmed by Sir James Browne in June, 1895. The decision is not always followed by the tribesmen, but the women are well aware that they can appeal to the Courts.

Among most of the tribes the women are allowed no Inheritance. share in inheritance; and a local proverb to the effect that "if a brother has a sense of shame, a wrapper would be a sister's share of the patrimony" illustrates the position of the woman. Among the Sanzar Khéls, Mando Khéls,

^{*} The proverb in Paghtú is the following :- Warer che nangyálái sí da khor yao tikrai si.

POPULATION. Shiranis, and Khostis, a widow, so long as she does not marry, is permitted to hold one-eighth of her deceased husband's property, both moveable and immoveable, but she does note enjoy any such right among the Sargara Kákars.

> Inheritance among males, is governed by tribal custom, but is based on the general principles of sharfat.

Language.

Language, at the Centus of 1901, was recorded only in the case of 5,152 persons, who were censused on the standard schedule. Most of them were aliens from other Provinces in India and some from other districts in Baluchistán and spoke their own dialects. The language of the Courts is Urdu, and a modified form of it originally introduced in the District by officials who came in the early days of the British occupation from the Déraját, is making way among the indigenous population; and especially in the villages close to the head quarter stations of the tahsils.

The indigenous population is almost wholly Afghan and speaks Pashtú. The soft Southern dialect, as distinguished from the Pashtú or Northern dialect is alone used. A brief account of its origin is given in Chapter VI (page 75) of Mr. Hughes-Buller's Census Report of Baluchistán for 1901. The Sibzais, now a section of the Akhtarzai; originally spoke the Ghilzai Pashtú, but being now amalgamated with the Kákars, they have adopted their dialect. The medium of correspondence, except in the case of official documents, is Persian; some of the mullas among the Sanzar Khél Kákars of Hindubágh carry on their correspondence in Pashtú verse written in Persian character.

Races tribes, and

The principal race found in the District are the Afghans. who represent about 98 per cent. of the total indigenous population, to which are to be added 1,138 Saiads and 6 Khétráns. The Afghan tribes of the District include:-

Kákars	•••	•••	•••	***		48,068
Shíráni	***	•••		•••	• •••	6,974
Panri	•••		. 141	•••		5,819
846		•••	400	•••		·

Ghilzai 7,500 Others (Tarins 66, Ustrána 1) ... 67 POPULATION.

•Theoretically an Afghán tribe is constituted from a stitution. number of kindred groups of agnates. The groups comprising the tribe are divided into a multiplicity of subdivisions, which it is almost impossible to follow, but for practical purposes four are in general use, the qaum or main body, the khál or zai representing both the clan, a group generally occupying a common locality, and the section, a group whose members live in close proximity to one another and probably hold common land, and lastly the kahol, a family group united by kinship.

A filiated with a good many tribes, however, are a certain number of alien groups known as mindún or hamslyah. Some instances of these are given in the account of the tribes that follows. In these cases the test of kinship does not apply, and such groups, families or individuals are united to the tribe by common good and common ill. In other words, common blood-foud is the underlying principle uniting a tribe, but the conception merges into the fiction of common blood, i. e., connection by kinship.

The Afghan are not organised under a common leader, as is the case with Baloch or Bráhui tribes, to whom the tribal officers such as mukaddams, wadéras, etc., are subordinate, but their more democratic spirit chooses a leading man in each minor group. Heredity is always an important factor among the Baloch, but with Afghans there is frequent chopping and changing, the weak giving way before the strong and the apt before the inept. Hence individuality has far greater scope among Afghans than among Baloch or Bráhui, but the retention of influence, once acquired, frequently depends on exterior support, such as that of Government, rather than on the tribesmen themselves.

The total number of Kákars in the District in 1901 was 43,068; males 28,273, and females 19,795. They represent

Kákara.

Consus of India (1901), Volumes V., V-A., Chapter VIII,

POPULATION. 68 per cent. of the total number of Afgháns, and 67 per cent. of the total indigenous population of the District. The Kákars are Ghurghusht Patháns, their progenitor Kák fra Kákar being one of the four sons of Dáni and grandson of Ghurghusht, son of Qais Abdur Rashíd. The various descendants of Kákar are shown in a genealogical table prepared, in 1901, by Khán Bahádur Mír Shams Sháh, Settlement Extra Assistant Commissioner, a copy of which is given in appendix III.

The Kakars in the District are divided into three clans:-

Sanatia		•••	•••	•••	4,429
Sanzar Khéls	•••	•••	***	•••	37,666
Sargara	•••	•••	•••		765

Included among these are a few Dáwi who are descended from Dáwi, brother of Kákar, a group called Lamar, whose origin is doubtful, and a few Targharas.

The Sanzar Khél clan.

The Sanzar Khél are descended from Sanzar or San jar, son of Sughrak and grandson of Kákar, and they are known by outsiders as the Saráns and Zhobis. Sanzar Nika was regarded as a saint, and many stories are told in confirmation of this belief. According to local tradition Sanzar was a posthumous son of Sughrak by a Saiad wife med Lazgi who after her husband's death returned to her own home in the Lúni country, where Sanzar was born. When he came of age, he was taunted by his companions with the fact that his father was unknown, whereupon his mother gave him his father's signet ring and told him who he was. Sanzar then came to Hindubágh. Here the Mughal governor, Míro, conspired to kill him, but Sanzar miraculously made his escape, destroyed the Khánki fort and married Míro's daughter by whom he had twelve sons.*

In the course of the Census of 1901 there seems to have been a misapprehension as to the constitution of the Sanzar

^{*} Note about certain sections of the Kákars living in the Zhob District of Baluchistan by Rái Sáhib Diwán Jamiat Rái, published in the Journal of the Asiatic Society of Bengal, Vol. LXXII, Part III, No. 2 of 1903.

SANZAR KHELS.

Khél, and they were divided into thirty-two sections, but all POPULATION. local authorities distribute them into twelve sections. They have affiliated certain other groups known as the Waslis. Among these latter may be mentioned the following:—The Sibzais, who now form a branch of the Akhtarzais in the Kila Saifulla tahaíl and who were originally Hotak Ghilzais; the Adozais among the Sulaimánzai Kibzais who are descended from a widow's son (whose origin is not known) whom Sulaimán, a merchant of Kandahár, abducted. Sulaimán afterwards came to Gosa, bought land and settled there. The Yásínzais among the Abdullazais are said to be the descendants of a foundling whose parentage is unknown.

The principal sections of the Sanzar Khéls are known, after the twelve sons of Sanzar, as Alízai, Abdullazai, Kibzai, Huramzai, Utmán Khél, Barat Khél, Nas Khél, Arab Khél, Parézún, Taimáni, Nisai, and Hindu Sanzar Khél. Of these the Parézúns migrated to the Pishín tahsíl of the Quetta-Pishín District, the Hindu Sanzar Khéls are in Shikárpur in Sind; the Utmán Khéls and Arab Khéls live chiefly in the Bori tahsíl of the Loralai District, while the Taimáni reside in the Siáhband mountains in Herát territory where they have been amalgamated with the Chár Aimtaq ribe. The following table shows the population of each section by tahsíls, in the Zhob District in 1901:—

Population in 1901.

Section.	Total.	Fort Sandeman.	Kila Saifulla.	Hindubágh,
Alizai Kibzai Abdullazai Arab Khél Nas Khél Huramzai Barat Khél Utmán Khél	 24,819 6,287 4,110 818 512 501 470	1,076 6,165 4,040 501	16,889 122 66 818 470	6,854 4 512 5

POPULATION. Each of these sections is divided into numerous subsections, which have been shown in table II-A. Volume B.

> The most important group of the Sanzar Khéls is the Jogízai ! 749: males 897. females 852), a sub-section of the Jalálzai-Shádozai-Alizais. Jogi, the progenitor of this group, was eleventh in descent from Sanzar. His two sons were Bostán and Mitha. Mokám, son of Békar Nika, greatgrandson of Bostán, had two sons, Ishák and Nawáb, who gave their names to the two rival factions of Ishak Kahol and Nawab Kahol. The Jogizais are endowed with a kind of religious sanctity in the eyes of their fellow-tribesmen, and it was on one of the Jogi's descendants, Békar Nika, that the title of the ruler of Zhob was bestowed by Ahmad Shah Abdali. The doings of the principal men among the Jorizai family chiefly form the history of the District and have already been given in some detail in an earlier section. The present headman is Sardár Muhammad Akbar Khán, Nawáb Kahol, who was recognised as chief in 1898 and on whom the title of "Sardár Bahádur" was conferred in June, 1897. Other important men among the Nawab Kahol are: Said Khan, Ayab Khan, Nari Khan, Mir Háji, Shádi Gul, Muhammad Sadíg, Lájwar Khán, Muhammad Afzal Khán, and Kála Khán. Among the Ishák Kahol the principal men are: Zarif Khán, son of the late S. B. Nawab Bangul Khan, Zarghun Khan, son of Sardár Shahbáz Khán, Lúni Khán, Dewána Khan, Tájuddin, Rahmán Ján, Jamál Khán, Uma Khán, Shér Khán, Báz Khán, and Bail Khán. Most of these enjoy revenne-free lands, are exempt from payment of cattle tax, are in receipt of grain allowances, and some also receive pay from the These concessions are mentioned in levy services. Chapter III.

> The Malézai sept among the Mírzais, a sub-section of the Alizai are looked on as a sacred class—pír khána.

The majority of the Sanzar Khéls are agriculturists, but some combine flockowning with agriculture. The Jalálzais and Mardins is chiefly subsist on the produce of their flocks. POPULATION The Ghorézai, Bátozai, and Ismáilzai also own large flocks. and the Alizai, Daulatzai, Mirzai, and Jalalzai are camel breeders. The Malézai section of the Ismáilzais are engaged in trade.

Besides the Jogízai Sardár Khél the leading men among the Sanzar Khél are (1905): Khán Sáhib Mián Khán and Páind Khán Kibzais, Shér Muhammad and Másam Khán Abdullazai, Mullá Dilbar Fakírzai, Khoidád Khán Mírzai. Malik Anwar Bátozai, Sheikh Yákúb Ismáílzai, and Muzhak Rustamzai-Hamzazai.

In the Census returns of 1901 Dumars (94: males 56, Dumars. females 38) were included among the Sanzar Khél Kákars. They all reside in the Hindubagh tahsil. Local tradition assigns them a low social status as being descended from a slave or musician of Sanzar and hence the well-to-do among the Sanzar Khéls hesitate to give their daughters to them in marriage.

Sanatia was a son of Husain and grandson of Jadram The Sanatia one of the six sons of Kákar. They are divided into two main branches, the Hárún Khél and Isa Khél. In 1901 the total number of Sanatias in the District was 4,429 (males 2,382, females 2,047) of whom 30 were in the Kila Saifulla and the remainder in the Hindubágh tahsíl. The principal sections represented are the Isa Khél (1,563). Mehtarzai (2,621), Sárangzai (174), Bázai (45), Mallazai (19) and Bráhímsai (7). They occupy the western portion of the tahsil, including the Kamchughai glen. They are agriculturists and some own flocks also. The Isa Khéls own a little land and earn their living by labour and selling firewood. The principal men among the Sanatias are (1905) Mír Alam Khán Mehtarzai and Muhammad Ján Sultánzai.

The Sargaras are descended from Sargarai, son of Kákar The Sargara and are divided into three main sections, viz. : the Sam Khél. Mandazai, and Hárúnzai. Most of them live in the Quetta-Pishin District. In 1901, the number of Sargaras in the

POPULATION. Zhob District was 765: males 425 and females 340, of whom 707 were in the Hindubagh and 58 in the Kila Saifulla tahsils. Those now found in the Quetta-Pishin District are alleged to have separated from the parent stock. under the leadership of one Mián Khán, in search of pasture and lived for some time in Haidarzai whence they moved to Kuchlák. All the three sections are represented in Hindubágh but the Hárúnzai are numerically the strongest (386), the Sam Khel coming next with 246, and the Mandazais 98. The Mandazais of Quetta-Pishin recently attempted to renew their connection with the Hindubágh Sargaras, but the latter refused to have anything to say to them, a fact which is of interest, as showing the fission which is continually taking place among the tribes. The Sargaras are an agricultural class and own lands in Parkanda and Sám Khél Káréz. Their leading man is Kamál Khán, son of Támás Khan, Umarzai Hárúnzai.

Physical characteristics.

Anthropometrical measurements, which were made of the Kákars in 1903, showed that they had broad heads. fine to medium noses, and that their stature was either above the mean or tall. The following were the average measurements * of those examined :-

Average Cephalic Index	•••	•••	81.9
Average Nasal Index	•••	•••	69·6
Average Stature	•••		168.3 c.m.
Average Orbito-need Index			116.6

The Kakars of Zhob are on the whole at present a wellbehaved and peaceful people, though they were troublesome in the earlier days. They have no great reputation for bravery and the estimation in which they are held by other Pathans is expressed in a local proverb. which says: "Whenever you see a Kakar, hit that Kákar with a stick, expel him from the mosque and you will see no mischief." Their dirty personal habits are alluded to in another proverb which speaks of them

^{*} See Census of India, Vol. I, Ethnographical Appendices.

as "besmeared with filth." Their standard of morality is POPULATION. somewhat low and the custom of majlis prevails among them. According to this custom young marriageable girls are supplied to respectable guests for entertainment, and a host who happens to have no girl in his family obtains one for the purpose from a friend's or a relative's family.

The Shiranis are the descendants of Sharaf-ud-din alias Shirani tribe. Sharkhabún, son of Saraban. Geographically the Shíránis are divided into two groups—those residing to the east of the Sulaiman range being known as the Largha Shíránis, while those residing to the west of that range are called the Bargha Shiranis. Like other Afghan tribes, they have spread out from time to time, and some of them are to be found in Shorawak, whilst others have given their name to one of the clans (Loharáni-Shíráni) of the Marri Baloch. After the Khidarzai expedition of 1890, to which a reference has been made under History, the tribe was split up, the Bargha Shíránis remaining under the control of the Zhob Political Agency, whilst the Largha Shiranis fell to the Dérá Ismáil Khán District of the North-West Frontier Province.

According to the local tradition, there was continual warfare between the Shiranis and Baitanis about three hundred years ago. The leader of the Shiranis found a Kurésh orphan boy, with whose miraculous help the Shiránis were victorious over the Baitanis. The boy was named Daré Khán, was married to a Shíráni woman, and the leading men of the Shiranis decided to send a batch of their tribe under his leadership to occupy the Bargha lands which were lying waste for fear of the Wazirs. This is said to be the origin of the Bargha branch. According to a local tradition the Bargha lands were formerly held by the Hazáras, who deserted the country and migrated to Rozgán in the north.

The recognized head or Sardár of the Shíránis is Baloch Khán, Mahmúdzai, who lives in Largha, and the Bargha

POPULATION. Shíránis consider Atta Khán, who is seventh in descent from Daré Khán, as their Sardár. But of recent years the Sardárs have been weak and incapable men and the family has lost much of its influence and importance. In pre-British days the Bargha Shíránis paid their headman one kúsa of grain per family at the rabi harvest, and three hundred kásas per annum from the produce of the Mughal Kot lands. The Narézai Mando Khéls also paid him one-tenth of the produce of their lands. Abdulla Sháh of Shína Khwaza and Miharbán Chúhar Khél are also important men. Salím Khán is the leading man among the Bábars

and Háji Baháwal Hak among the Haripáls.

In 1901 the Bargha Shíránis in the District numbered 6,974: males 3,689, females 3,285, the number of adult males being 2,135. They are divided into the following clans: Bábar (1,749), Chúhar Khél (451), Haripál (1,593), Hasan Khél (2,095), Kapíp (290), Marhél (283), and Oba Khél (514). They have from time to time affiliated other groups.

The Haripáls claim a Saiad descent, and allege that their progenitor, Haríf, was a Saiad from Pishín, who migrated to the Shíráni country, married a Shíráni woman, and was affiliated with the Shíránis. Similarly the Kirmánzai among the Hassan Khél are said to be the descendants of a foundling (mindún).

The principal villages of the Shíránis in the Fort Sandeman tahsíl are Kuria Wasta, Kurram, Ghazlawar, and Shar Ghalai, those of the Haripáls Bráhím Khél, and Algada, while the Bábar are chiefly found in Garda Bábar, Algada Bábar, and Bráhím Khél.

The Shíránis are agriculturists, and also own flocks but the Marhél clan among them are almost all nomads. Mr. L. W. King, C. S., when Deputy Commissioner, Déra Ismáil Khán, described the Shíránis in 1890 as follows:—

Oharacter and "The Shiranis (or Maranis, as they prefer to call themappearance. selves) are perhaps the most uncivilized tribe on the Ders

Ismáil Khán border, and have all the characteristics of wild POPULATION. races. They are not given to thieving, but lying is a vice which I am afraid, intercourse with our district has taught them, as amongst the Sultánzais and Khiddarzais who inhabit the slopes of the Takht and are far removed from our civilising influence a Shíráni's word can generally be relied on.

"Murder or killing for the mere lust of blood is very rare. They are not so cheerful and joyous as their neighbours, the Mahsúds, and seem to take the world much more seriously. Fanaticism cannot be assigned to them as a fault, and their performance of the rites of religion struck me as being very perfunctory. They are lazy in the extreme and thriftless. In appearance they are ill-favoured, low-sized, and wiry with high cheek bones. They are by no means a manly race, though an exception in this respect might perhaps be made in favour of the Khiddarzais, some of whom are fine looking men." They are locally considered to be bad friends and a proverb says that "a dog which knows you will not bite you, but a Maráni who knows you will eat you up."

The Panris or Pannis were originally a nomad tribe of the Ghurghusht Afgháns and the Sáfis, a branch of the tribe, are still found in considerable numbers near Ghazni, and another large section, now known as the Gadúns, reside in the Peshawar District to the east of the Yusufzai country. branch of the Panris appears to have wandered from the west to the Sulaimán hills, and from thence to have spread gradually to the south. The Músa Khéls and Isots of the Loralai District are Panris, and another section found their way into Sángán from the Bolán pass and gradually acquired Bádra, Quat-Mandai, and Sibi. Eventually they got possession of, or were perhaps nominated by the rulers of Kandahar to administer Barkhan, and the lands now held by the Marris. The descendants of the Panris are also found in Southern India where, from time to time, they have made a considerable figure in Indian history. Prior to the downfall of the house of Babar, one of the celebrated free-lances

The Panri tribe. POPULATION. of the period was Dáúd Khán, a Panri, who was remarkable for his generosity and liberality which have passed into the proverb: Bani ta bani nahín ta Dáúd Khán Panri, that is to say, if the worst comes to the worst, there is still Dáúd Khán to fall back upon.

According to the Census of 1901 the Panris of Zhob District are represented by three clans: the Lawanr or Lawanas, the Mando Khél and the Músa Khél; and their total number was 5,319: males 2,835 (including 1,667 adult males) and females 2,484. The Músa Khéls only numbered 69. This classification has been retained, but in reality the Mando Khéls have no connection either ethnically or in practice with the Panris. They are descended from Mando, one of the three sons of Ghurghusht and a cousin of Kákar, son of Dáni.

The Lawana clan.

The Lawanas or Lawanrs are descended from Lawanr, one of the six sons of Panri, and are therefore related to the Músa Khéls, Isots, Bárúzais, and others. In 1890 they had settlements in two places-(1) at southern Tirwah and on the Kundar river, between Kundar Nigángi and Nákhél; and (2) at Sángan in the Sibi District. In 1901 their number in the Zhob District was 970: males 518, females 452, almost all (958) of whom are in the Kákar Khurásán circle of the Hindubágh tahsíl. The principal sections recorded in the census papers are the Mandarzai (593), Ismáilzai (295) and Husain Khél (70). Before the British occupation of the country, the Lawanas were considered as owning allegiance to the Jogizai family and paid small contributions to them. The Lawanas are both agriculturists and flockowners, but their chief means of livelihood is the produce of their flocks. They also manufacture earth salt. The leading men among the Lawanas are Gori Khán, Násar Khán and Shainak.

The Mando Khél clan.

According to the local tradition the Mando Khél (Ghurghusht Afgháns) came from Náwar in Khurásán and in conjunction with the Músa Khéls and Sanzar Khél Kákars defeated and turned the Mughals out of the country and

occupied it. They are divided into two branches, the POPULATION. Hádizai or Sheikh and Hider Khél. In 1901 the total number of Mando Khéls in the District was 4.280: males 2,278 (including 1,330 adult males) and females 2,002. The Sheikh or Hádizai only numbered 131, all the rest being distributed over twenty-five sections of the Hider Khélof which Kariazai (267) are considered to be the sardár khél or the leading family. The Mando Khéls occupy the country round Fort Sandeman, their principal villages being Apozai, Kam Gustoi, and Buranj. They are generally a peaceful and inoffensive people, and among their neighbours are known as the Manda Khel or backward tribe. Their chief occupation is agriculture, but most of the Sulaimanzai section (755) are flockowners. The Mando Khéls owned allegiance to the Jogízai Sardár but always had a headman of their own. The present headman is Sher Khan. Akhtar Khán, Sulaimánzai, and Jalát Khán, Izatzai, are also important maliks among the Mando Khéls.

The Safis are a clan of the Pannis or Panris, but those in The Safi tribe. the Zhob District disown any connection with their brethren in the Sibi District. They allege that they belong to the Ghilzai tribe and migrated from Afghánistán. In 1901 their number in the District was 345 (males 209, females 136), and they are divided into three sections: the Páinda Khél (265), the Traman Khél (58), and Jáni Khél (27). The majority of them are nomads, but some have acquired land by purchase, and are settled at Sáfi Kot on the bank of the Zhob river, in the Fort Sandeman tahsíl. Their headman was Usmán Ghani, who migrated to Afghánistán in 1894, and the present (1906) leading man is Torán.

In 1901, the Saiads in the District numbered 1,138: males The Saiads. 588 and females 550; the local distribution being Fort Sandeman 966, Hindubágh 107, and Kila Saifulla 65. The principal clans represented are: the Bukháris 177, Khosti 820, Táran 36, Kharshín 32, Husaini 14, Kurésh 14, and 45 others.

POPULATION. The Khostis claim to be the descendants of Saiad Tahir and are said to have emigrated from Khost in Afghánistán. Of the total of 820, 772 are in the Fort Sandeman tahsil and 48 in the Kila Saifulla tabsil. They are divided into four sections: the Umarzai, Márúfzai, Míráni, and Sohbat Khél. the first three are in the villages of Márúfzai, Lahráni, and Umarzai between Lakaband and Bábar, and the last named section are settled close to Aghbargi Mánda in the Kila Saifulla tahsil. Their leading men are malik Kondal and Sheikh Raza Gul. They intermarry with the Kákar tribes among whom they live and adopt their customs.

> The Bukhári and other Saiads are scattered among the various villages of the District and live chiefly on the charity of the people.

Ghileais.

In the census taken in 1901 the Ghilzai Afghans at that time in the District numbered 7,500: males 4,221 and females 3.279. They were distributed over Fort Sandeman (5.076). Hindubágh (1,905), and Kila Saifulla (519); and belonged to the following clans:-Násar 3,796, Sulaimán Khél 2,209, Kharot 868, Andar 108, Tokhi 196, Taraki 109, Hotak 41. and others 173.

The majority of these are nomads who under the general name of Powindahs visit the District during the winter during their annual migration from Afghanistan to the Déraiát and back. Besides the clans mentioned above the Shinwar, Mala Khél, Mia Khél, and Dotáni also visit the District. The Mia Khéla come from Afghánistán by the Gomal, proceed to Dámán by the Ghwae-liár and Dahána Sar, leave their families there, and trade in Calcutta and Delhi in cloth. The Dotánia live in Wazíristán to the north of the Gomal and come down to the Zhob District in October to graze their flocks in the hills near Kuchbina. returning to their homes in April.

The Taraki, Andar, Kharot, Shinwar, and Mala Khél are large flockowners and enter the District in October from passes between Kamar-ud-din Karéz, Késhatu, and Tirkha-war; some of the Taraki, Andar, and Kharot proceed POPULATION. by Loeband to Toba Kákari, Pishín and Shoráwak, and a larger number of the Kharot, Shinwar, and Mala Khél proceed to Hindubágh and Kila Saifulla by the Mughal Cháh route. Thence they move on, grazing their flocks as they go, through the Zhob valley to Duki, Loralai, and Músa Khél while the Mala Khél camel owners go to Dámán by Dahána Sar. After leaving their families in the Dámán. the Mala Khéls return to Fort Sandeman and engage in transport work. They also import grain from Bárkhán, Loralai, and Kila Saifulla into Fort Sandeman. Such of the Powindahs as have caravans of ghi, almonds, wool, postins, barak cloth, and raisins enter the District by Késhatu. some of whom go on to Pishin and Quetta via Loeband and Sábúra, some go to Fort Sandeman via Shighála, and others by Khasnob to Loralai.

The poorer members of the Kanda Khél and Barézai sections of the Kharot remain in Sáng-ghar and Siliáza and earn their livelihood by selling firewood, while other sections who own camels come by the Gomal and go to Dámán by the Ghwae-liár.

The Nasar Powindahs who periodically visit the District belong to the following sections:—(1) Kamál Khél: (2) Malézai; (3) Pándi Khél; (4) Tarak Khél; (5) Ya Khél; (6) Niamat Khél; (7) Bhar Khél; (8) Zangi Khél; (9) Talák Khél; (10) Nabo Khél; (11) Ush Khél; (12) Jalál Khól; and (13) Masézai. Of these the first named six sections live from December to March in Dámán in the Déra Gházi Khán and Déra Ismáil Khán Districts, and from April to November in the Duki, Bori, and Kila Saifulla tahsils of the Baluchistán Agency. The Kamál Khél and Malézai largely deal in wool which they buy in Zhob, Loralai, Sháhrig, and Kohlu and export to Karáchi. Some of the men of these sections, and of the Bhar Khél buy wool in Kákar Khurásán which they send to Karáchi by rail from the Yaru Káréz railway station in the Pishin tahsil. The

Kharot.

Násars.

POPULATION. bigger merchants among them make advances of money to the flockowners before the shearing season and fix a rate, while others make purchases through their agents, to whom they pay commission at the rate of 5 per cent. known as tumani. When returning from Dámán, the members of these six sections bring wooden plates (kásas), molasses, silk, needles, thread, rings, beads, and glass bangles which they retail to villagers in Zhob and Bori. The Malézai, Zangi Khél, Talák Khél, and Nabo Khél Násars own flocks of sheep, while the Ush Khél, Jalál Khél, Niamat Khél, Masézai, and Bhar Khél are chiefly camel owners. The latter sections deal in almonds, travelling by Kosaka, Kandíl, and the Gomal to the Déraját in October and returning to their homes in April.

The Sulaimán Khél.

The opening of the Gomal pass in 1889-90 first brought us into direct relations with the nomad Sulaimán Khéls who, during the winter months, occupy and graze over the country stretching northward from the Sáng-ghar near Fort Sandeman to the neighbourhood of Wáno, and eastward from the Chukhan and Lower Kundar to the Zhob river, or in dry seasons to and beyond the Sulaimán range. The principal sections who graze over this tract: are the Sultán Khél, Saráz Khél, Minzai, Mahmúd Khél, Ahmadzai, (a small offshoot from the great Ahmadzai section of Upper Afghánistán), and the Jalálzais.

Of these sections the Sultán Khél appear to be the most numerous and powerful, said to number from 6,000 to 8,000 fighting men but comparatively few of their people graze actually within the Zhob District: large numbers go down to the Déraját, and the bulk of those who stay above the passes, including the chief maliks, generally inhabit the Zarmelán plain north of the Gomal river. There are, however, a considerable number of them round about Gulkach and on the Girdao plain and their maliks exercise a more or less indefinite authority over some of the minor sections, e.g., the Mahmúd Khéls and Ahmadzais.

The Minzais are also a large and powerful section POPULATION. (estimated at 4,000 to 5,000), and large numbers of them gome into Zhob, occupying the country round Husain Nika, Shinbázha, and south to the Sri Toi.

During the negotiations that led to the opening of the Gomal, the Sulaiman Khéls showed themselves friendly. Shahabuddin Khan, the head of the Khoidad Khels, came in and paid a visit to the late Sir Robert Sandeman at Apozai, and no trouble was given by the Sultan Khél who. occupying the country about the Lower Gomal, were in more immediate contact with the expedition in 1889. Again in the winter of 1890, previous to the Shirani expedition, a force under Sir George White marched down the Kundar and Gomal to Gulkach without meeting with any opposition from the Sulaimán Khél. In the beginning of 1891 a military post was placed at Gulkach. The Sultan Khéls proved friendly, and gave useful assistance to Captain (now Sir Henry) McMahon, then Assistant Political Agent in Zhob, who accompanied the expedition and arranged for the establishment of the post and for the Zhob Valley Railway Survey operations. Their friendly behaviour to us tended, in conjunction with other causes, to bring the Sultan Khéls into bad odour with the Afghan Government, and during the years 1891-93 Muhammad Akram and certain others of their maliks kept out of reach of the Afghan authorities. The Sultan Khels subsequently made their peace with the Afghán authorities and in 1894 their maliks accompanied the Afghan Joint Commissioner on the Baloch-Afghan Boundary Demarcation Commission. Again on the formation of the Wazíristán Delimitation Commission they were deputed to attend on Mr. King, presumably to represent Afghán interests as far as regarded the country in which the Sulaimán Khéls were interested. Here they seem to have acted a somewhat double part, agreeing to the line fixed by Mr. King on the one hand and on the other representing to Sardár Gul Muhammad and the Amír that

POPULATION. they had strongly protested against it. Later they again fell out with the Afghans and Mir Hazar, Muhammad Akram, and Kattai along with some minor malike visited the Political Agent at Fort Sandeman during November-December, 1895, and petitioned to be given some allowances. Having been disappointed in this request, on their way back they threatened the Gulkach post, but soon saw their folly and disclaimed any hostile intentions.

In March, 1896, Mr. H. W. Gee, Deputy Commissioner of Déra Ismáil Khán, and Captain C. Archer, Political Agent, Zhob, met the Sulaimán Khél maliks at Gulkach and discussed future arrangements. Captain Archer and Mr. Grant, Political Agent, Wáno, again met the maliks at Gulkach in March, 1897, and Malik Muhammad Akram and 13 others signed the following agreement:—

- "Whereas we, the maliks of the Sultán Khél, Minzai, and Saráz sections which graze in the hills in British territory during the winter and spring, have submitted certain petitions to Government regarding the grant of allowances and of permission to cultivate, and whereas Government has been pleased to grant our requests on certain conditions, we on behalf of our tribes gratefully agree to the offer made to us by Government and accept the conditions imposed, as follows:—
- (1) Government will grant us fixed sums of the following amounts on our arrival in British territory each autumn and again each spring on our leaving for Khurésán:—

Sultán Khéls Rs. 1,425 in the autumn and a like amount in the spring, making in all a total of Rs. 2,850 a year.

Minzais Rs. 450 at each season, in all Rs. 900 a year. Saráz Rs. 275 at each season, in all Rs. 550 a year.

We have arranged and have placed on record the distribution of these sums among our different sections and the sums to be paid to minor making within each section.

(2) Government will grant us the right to bring under POPULATION. cultivation all culturable lands within the limits of Zarmelán, Gul-kach, Girdao, and Shinbázha with regard to which no other claimant can prove recent cultivating occupation.

In return for the above privileges and for the protection of the British Government to our grazing and cultivation, we agree willingly on behalf of ourselves and our tribes to the following conditions:—

(1) To pay grazing tax in future both in the Zhob District and in the Wazíristán District at the following rates, being those now in force in Zhob:—

			Ks. a.	
Male camel per her	ad	•••	0 8	
Female do. do.	•••		1 0	
(or As. 12 per camel	whicheve	r Gove	rnment may o	rder).
			Rs. a.	
Bullocks and cows	per head	•••	0 6	
Donkeys	do.	•••	0 4	
Sheep and gests	do.	•••	0 1	
We hold ourselves res	ponsible	for th	e collection of	f the

We hold ourselves responsible for the collection of the grazing tax with the assistance of Government when necessary.

We can, however, only agree to this on the understanding that grazing tax at the same time and at the same rates be taken from the Dotánis who graze alongside us within Wazíristán limits. Otherwise we shall be disgraced in the eyes of the other Ghilzais.

- (2) We agree to be responsible for the good behaviour of our sections while residing within the Zhob and Punjab hill tracts and for the detection of offences committed within the limits where our sections are residing.
- (3) We agree to pay land revenue on any land we may bring under cultivation within these tracts whenever Government sees fit to demand it, and we will be responsible for the realization of such revenue.

POPULATION.

(4) Government has the right to place posts at any place within these tracts, when they may deem it necessary.

We agree to these arrangements coming into force from, next autumn, provided that grazing tax is taken from the Dotánis at the same time."

The usual rate of grazing tax (tirni) is As. 8 for a male and Re. 1 for a female camel. The tax is levied from the Sulaimán Khéls by contract, and the amount annually realized in the Zhob District has been as under:—

					Rs.
1898-99	•••	•••			1,175
1899-1900		,	•••	•••	1,660
1900-01	•••			•••	2,500
1901-02	•••		***		2,535
1902-03	•••	***	•••	•••	2,250
1903-04	•••		•••		2,250
1904-05		•••	•••	•••	550
1905-06		•••	•••	***	906

The allowances paid to the Sulaiman Khéls by the Zhob District amount to Rs. 1,550 per annum as detailed below—

Section.		Sub-section,		Monthly Allowance,
Sultán Khél		Mír Khán Khél		Rs. 200
Minzai	•••	Bádin Khél	•••	850
,,	•••	Mír Gul Khél	•••	850 .
,,	•••	Mohbit Khél	•••	100
Saráz Khél	•••	Mahmúd Khel	***	250
"	•••	Jalálzai	•••	300

The Wazirs.

The Wazir Afghans, a powerful tribe who inhabit the country north-east of Zhob have always been a source of trouble and have committed raids and robberies from time

to time in the Zhob District. They are a race of tall POPULATION. active hillmen of vagrant and pastoral habits who are more prone to rob their neighbours than to work for their living. In 1891 the Wazirs were responsible for 41 reported cases of murder, cattle-lifting, etc. They were again particularly active during 1892 in depredations in the Zhob District. The most serious of their offences were attacks on sentries and escorts between Mir Ali Khél and Khajúri Kach and Gulkach, all of which were successful and resulted in much loss of life and the gain to the Wazirs of a certain number of rifles. During 1893 they committed no less than 37 raids and other offences within the Zhob limits. The scene of most of these outrages was the Khajúri Kach-Mughal Kot road, which was rendered so unsafe that special measures had to be taken for the protection of travellers. In 1894 they committed The Wazirs were comparatively quiet during 1895 and 1896, but in 1897, they were again rather more active and did much mischief, and during 1898, 20 raids were attributed to them. In May, 1899, the Wazírs attacked a party of 5 Zhob Levy Corps sowars between Mir Ali Khél and Girdao. One sowar was killed and another wounded and their rifles were taken away by the raiders. Besides this, eight cases of highway robbery and theft were also reported against the Wazirs. In December, 1900, the Mahsiid Wazir blockade commonced and continued until March, 1902.

The troops noted in the margin* were allotted for blockade

Detachment, 6th Bombay Cavalry, Wing, 24th Bombay Infantry, 23rd mand of Lieutenant-Bombay Rifles, Zhob Levy Corps.

Colonel R. I. Scallon of the 23rd Rifles. The boundary of the Zhob District to be watched by these troops was roughly a line from Gustoi along the Kundar river to its junction with the Gomal at Domandi; thence along the Gomal to Toi Khulla (where the Wana Toi joins the main stream); then

POPULATION. Over the hills in a south-easterly direction to the Ghzamanda Nullah; thence across the Zhob River to Kuchbina Nullah, about 4 miles; and from there eastward to the Zao Pass in the Sulaiman range; a total distance of about 55 miles. The troops were distributed in various posts and were instructed to capture and hand over to the Political authorities any Mahsúd Wazirs who might be discovered beyond the limits of their own district; to prevent any supplies of food or clothing from passing into the Mahsud country; to protect the persons and property both of the inhabitants of Zhob and of the Powindahs and Násars who twice yearly pass along the Gomal valley to and from the Punjab; and for these purposes to co-operate, as occasions required, with the troops and levies employed in Wazíristán. The Commissioner of the Déraját computed that during the Powindahs migration some 50,000 souls and 150,000 animals traverse the Gomal. A large camping ground was selected on the left bank of the Gomal on the lee of an isolated hill which was occupied by a strong party of the 23rd Bombay Rifles. The caravans were met as they crossed the Afghan border, and convoyed by parties of the Zhob Levy Corps to the assigned camping ground near Gulkach. Here they were passed on in such numbers as would ensure no block taking place anywhere along the road, to Khajuri Kach where there was a picquet of the 23rd Bombay Rifles, parties of which escorted the caravans to Toi Khula where they were handed over to the Southern Waziristan Militia. Other caravans using the Zhob Valley were protected by parties. detached from Mughal Kot, Mír Ali Khél, Girdao and Husain Nika. The result of these arrangements was that the Powindahs suffered no loss in person or property in Zhob or the Gomal. Several petty raids were attempted by the Wazirs, but as a rule the raiding parties which managed to enter Zhob returned with difficulty and empty handed. The troops employed on this duty made many roads and tracks. the most important one being a camel road 9 feet wide from Mír Ali Khéi in Zhob via Wazíri Bágh to Gulkach on the Population Gomal river, a distance of 23 miles. The Zhob Levy Corps rendered excellent service, and on more than one occasion Lieutenant-Colonel Scallon brought to notice especially commendable acts of service by parties of the corps. In one instance over 1,000 sheep lifted near Chachobi were saved by the energetic action of the Risaldár Commanding the Zhob Cavalry at Mughal Kot.

In July, 1904, a party consisting of about 15 raiders raided the Zhob Levy Corps post at Khúni Burj and carried off 12 Martini-Henry, and one Snider carbine and 126 rounds of ammunition, killing one duffadár and wounding two sowars, one of whom subsequently died. The raiders made good their escape and could not be arrested. The joint enquiry held by the Political Agents, Zhob and Wáno, showed that the raiders were Mahsúd and Shiráni outlaws from British territory living in Afghánistán near the border.

Subsequent attacks were made on the Levy Corps post at Shinbáz in April, 1905, and on Gudawana in December, 1905. In both cases the attackers were repulsed. The defenders in each case suffered severely, but succeeded in holding their posts and in preserving the rifles and Government property in their charge. Five native officers and meu of the Corps received the Indian Order of Merit for their gallant conduct on these occasions.

Of the total population of 69,718 censused in 1901, 67,772 or 97 per cent. were Muhammadans, 1,529 Hindus, 320 Sikhs, 50 Europeau and Eurasian Christians, 46 Native Christians and one Jew.

Religion.

The Muhammadansof the District belong to the Sunni sect. The Saiads and mullis alone are versed in the tenets of their religion. The tribesmen generally are devout in performing their prayers at the stated times, in keeping the fasts, and in setting apart a portion of their income for charity (zakát), but in other respects their religion is mingled with superstition, and there is a general belief in the intervention of

Islám.

POPULATION, ancestors and saints in the pursuits of daily life. These are invoked to cure diseases, to avert calamities, to bring rain, and to bless the childless with offspring. Saiads and mullasalso play an important part, and their amulets, charms, and blessings are constantly invoked. Some of them are credited with the power of bringing rain, of curing diseases, of granting children, of averting disease and locusts from the crops and of exorcising evil spirits. A list of the most influential mullús in the District is given in table III, Volume B. A common superstition is that if any one calls to a tribesman as he is starting on a journey, he must sit down before going farther. If immediately after starting, a hare crosses his path he must return home and start again. The same holds good if he meets any member of the professional weaver class who are locally known as péshawar. If a jackal crosses the path it is considered a good omen. A journey must not be undertaken on a Tuesday, nor during the month of safar. A push or blacksmith will not cut a green pistachio khanjak tree. nor will he sell a stone griddle which has once been placed over fire. The Taran and Khosti Saiads in the Fort Sandeman tahsil are credited with the power to render an enemy's bullets harmless, and the members of the Sháhézai sept of Jalálzais are believed to be able by their charms to avert locusts. In pre-British days it was not uncommon to prove the guilt or innocence of a suspect by ordeals by fire, water, etc. In upper Zhob the ordeals by water were generally performed in the Fakírzai spring near Bábu Chína. The procedure was as follows:-A man stood in the spring with a pole in his hand about 6 feet long, the end of which he inserted in the mud under the water. The oriminal after receiving blessings from the mullá, was made to hold his breath and sit under water whilst the man holding the pole kept him down with the hand which was free. As soon as the criminal put his head under water a man posted on the bank ran to another, placed at a distance of from 30 to 70 paces

from the bank. As soon as the first man reached the POPULATION. second, the latter started and ran to the bank, and if the eriminal could hold his breath till he reached it he was held to be innecent. In the ordeal by fire a heated plough share was placed on the hand of the suspect and he was made to take 7 steps. There were also other forms of ordeal. A stick was inserted in a hole drilled in the bottom of a wooden bowl. A multi would then read the verse sura yasin from the Korán and blow at the bowl, and should the bowl turn to the left the suspect was declared guilty. Or the same verse would be chanted over crushed barley which would be given to the suspect to swallow and it would stick in his throat if he were guilty.

There is a general belief in evil spirits and their powers of theft, and the grain on the threshing floor is encircled by a line drawn with a sword, and a copy of the Korán is placed over it until it can be measured for division, for fear lest evil spirits should interfere.

In the Census of 1901 the total number of Hindus and Hindus and Sikhs in the District was 1.849, of whom 1.818 were censused on the standard schedule, and represented mostly the aliens from Indian provinces. In pre-British days, a few families of Hindus, who originally came from Vihowa in the Déra Gházi Khán District, were engaged in trade at Mína Bázár, but since the establishment of the bazar at Fort Sandeman some of them have returned to their homes whilst others have moved to Fort Sandeman.

Hinduism.

The Arya Samáj movement is wholly confined to the Arya Samáj. Hindus from the Punjab who are employed in Government offices. There is an Arya Samaj at Fort Sandoman, where there is a mandir or prayer hall.

Occupations were only recorded in detail in 1901 in the Occupation. areas censused on the standard schedule, the population of which was 5,152 or about 7 per cent. of the total population of the District. The majority of these were aliens in the service of Government or engaged in trade.

12 M

POPULATION. Outside the town of Fort Sandeman and tabsil head quarter stations, the family system of enumeration was followed. the occupation of the head of the family being assumed to be that of the remainder. The population of the District in this case may be roughly divided into six classes by occupation: landowners, cultivators, flockowners, traders, labourers, and artisans. The landowners are the most numerous class, and the other classes are recruited from among them. They include the principal tribes of the District, viz., the Kákars, Mando Khéls, Shíránis, and Khosti Sheikhs. Most of these cultivate their lands themselves. except the leading families among the Jogizais and the Safi nomads who employ tenants. The tenants also belong to the poorer classes among these tribes. The flockowners. are chiefly the Malazai and Kamálzai in Hindubágh; the Jalálzai, Bátozai, Ali Khél, and Ghorézai in Kila Saifulla: and the Mardánzai. Huramzai, Sulaimánzai Mando Khél, and Sáfi in Fort Sandeman. The Ali Khél, Ghorézai, and Daulatzai in the Kila Saifulla tahsil are the best camel breeders. The labourers are chiefly to be met with among the poorer Kákars and Ghilzai nomads. artisans indigenous to the country are the blacksmith (push). carpenter and weaver (péshawar), who are scattered in different villages in each tahsil. Some of the Lowanas and Jalálzais manufacture earth salt.

Social life.

Social or class distinctions are little observed among Afgháns as a rule, though there are a few families such as the Jogizai, and some Saiads, who, for various reasons. claim a superior social status to that of their fellows. Dumars, who are said to be the descendants of a slave or minstrel of the Sanzar Nika, are considered by the Kákars as socially inferior, and the respectable among the Kakars generally refrain from giving their daughters to them in marriage. Weavers (péshawar) are also regarded as inferior, but the push or blacksmith assert equal status with the tribesmen and some of the push claim a Saiad descent.

Among the rest social position is on a uniform level, and POPULATION. even the title of malik confers little distinction, and the cholder of the title is treated as an equal by the villagers. In the absence of a Saiad or mulla precedence in an Afghan assembly is generally given to the oldest.

The custom of taking and giving news, which is usual everywhere, also prevails among the Afghans of the District but in a less ceremonious form than is observed by the Baloch. Enquiries and answers are limited to the usual salutation. welcome, and enquiries after the health of the person concarned and also of his immediate relations. When addressing persons of sanctity, the term pir sahib, mira sahib. or sheikh sahib are used, and their hands are kissed and people rise when they enter an assembly.

Hospitality, among the Afghans, is not so profuse as in Custom of hospitality. the case of the Baloch, and the custom is limited to relations and friends, who are entertained according to their position. A near and well-to-do relation or an intimate friend will be given meat and bread, but a poor relation must be content with such food as may be ready in the house. Strangers resort to the mosques and the villagers who meet them at the prayer times either send them their food or take them home and feed them, the system being known as lwatsa. Some of the leading men aomng the Jogízais keep guest houses, but these are in the first place intended for relatives and friends.

It is customary among the tribesmen to raise subscriptions Co-operation among themselves on certain occasions, the system being known as baspan, sawal, or manga. Such subscriptions are raised when an individual has been reduced to poverty owing to unforeseen circumstances, such as the burning down of his house, or when a heavy fine has been imposed on him, or when he has to pay blood money. The person in need, who is accompanied by one or two friends, invites contributions from among his own tribesmen, who pay him in cash or kind, according to their means. Such subscriptions are not raised to pay bride-price or to meet marriage

POPULATION. expenses except by the Sargaras, among whom the bridegroom's friends contribute one kása of grain per family towards the marriage feast.

Food.

The majority of the people have two meals daily, one in the morning called barazar markhúma, gahíz or sahár, and the other at sunset (máshám hor), men and women generally eating separately. Some of the well-to-do people have a third meal early in the morning (nihárai) or in the afternoon, and some cultivators, when at work, have a meal brought them at mid-day. All Afgháns have a voracious appetite, and a male adult will eat as much as 2 lbs. of broad at a meal if he can get it.

Wheat is the staple food-grain and is made into unleavened cakes (patiri) baked on a griddle. In the summer leavened cakes (khamiri) are usually eaten for the morning meal. Nomads on the march eat kik made by wrapping dough round a hot stone and putting it in the embers.

Most people eat their bread plain, and without relish, but an infusion of krut or boiled whey known as krut ghori is sometimes poured over the pieces, to which boiling ghi is added. The Kákars of Hindubágh and Kila Saifulla prepare pandkai by boiling wheat flour in milk and making the paste into small cakes. These are dissolved in hot water and pieces of bread broken in it. It is considered a delicacy. The tribesmen, and more especially the flockowners among them, take milk and its preparations, generally butter-milk (shalombas), with their meals from April to July. Cows are kept by those in good cirumstances, but the milk commonly drunk is that of sheep or goats, and in the Kila Saifulla tabsil also of camels. Curds, made with rennet or khamazirae (Withania coagulans), form the basis of most preparations, including butter and cheese. In Upper Zhob, next to butter-milk, krut is in demand which are cakes made of boiled whey to which salt has been added.

Meat is seldom eaten in summer except when the inhabitants of a hamlet combine to buy a sheep, goat or bullock, FOOD. 98

or when a moribund camel or other animal is killed. It is POPULATION. usually half-boiled and is cooked without condiments, except galt. In the Hindubágh tahsil the blood of animals slaughtered was formerly boiled and eaten. Locusts and the are singed in fire and eaten.

Ogra, a porridge made of crushed wheat, maize or millet and sometimes of wild almond fruit (zarga) and boiled in water in winter, and in butter-milk in the summer, was the most common article of food in former days, and is still popular among the Kákars, especially in the spring. In winter, in the Fort Sandeman tahsil, a small quantity of lánde meat (a kind of biltong) is sometimes added to it. Cakes made of maize, juári or millet flour are eaten as a change from wheat; and rice porridge forms the staple food of the Mando Khéls in summer. The principal article of food of the Shiránis is maize bread, though cakes made of wheat, barley, and juári are also sometimes eaten. Ash, another kind of porridge, is made by boiling wheat flour in milk. The Kákars of Hindubágh and Kila Saifulla largely supplement their foodstuffs with shinas, the fruit of the pistachio khanjak, which is eaten both fresh and dry. Before use it is pounded and either mixed with bread, or made into an infusion in which the cakes are steeped (pusa). A similar use is made of the juniper berries.

The use of lands or parsanda, a kind of biltong, is common among the well-to-do classes and also among some of the poorer people. It is generally made of mutton, but occasionally also of goats' meat, beef, or camels' flesh. Ordinarily a family will kill three to five sheep for making lands, but the well-to-do kill more.

Sheep are specially fattened for the purpose, and are killed about the end of October. The carcase is either skinned, or the wool is pulled off with the help of applications of boiling water. After the carcase has been singed in a fire, the feet are cut off, and it is cleaned; the stomach is then joined together with green twigs, and the body is

POPULATION divided from neck to tail, the bones of the back and legs being taken out. Such meat as adheres to these members. is salted and placed in an emptied entrail, and is considered. a great delicacy. The carcase is now slashed and thoroughly salted, rolled up, and kept for a night to get rid of the moisture in the meat; after being further treated with salt and asafcetida, the meat is now hung on a forked pole and exposed to the air, day and night, except in damp weather. It is ready for use in about a month. It is examined from time to time, and more salt and asafoetida are rubbed in if it shows signs of decomposition. When ready, it is cut up and stored in a jar or sheep skin, and is fit for use till March. When required for eating, it is boiled in an earthen pot for three hours over a slow fire. Most people eat it once a week or on very cold days. Some people also eat pieces of this meat raw.

Now-a-days the diet of the well-to-do among the people is becoming more civilized. They drink green tea, and eat fowls, eggs and rice.

Fruit and vegetables.

Melons, water-melons, grapes, apples, apricots, mulberries, and sanzali fruit (Elwagnus hortonsis) are eaten where procurable. The wild fruits in use are the pistachio khanjak, shinani (Olea cuspidata), and wild almond. The use of vegetables is unknown among the indigenous population, though they eat the tender shoots of wheat and barley and also the following wild herbs:—Ushnár astaghnár, khokhai, injáora, shézgi, raghbolae, péwark, marghakai, pushai, gul-i-mákhi, khátol, bushki, kursaka, gadzawari, darzai and khwázha másal, and sandi.

Utensils.

The cooking utensils ordinarily in use consist of a tripod, a stone griddle, an earthen pot, a few drinking bowls, a wooden plate used both for kneading and eating and a copper can with a spout (gadwa).

Dress.

The dress of the majority of the people is simple and made of coarse cloth, that of a male costing about Rs. 7 and of a female Rs. 5-8-0. An average tribesman wears a turban

(pagrai), a jabai landai or khalkai which is like a smock POPULATION. frock, partuk or baggy trousers, a long tikras or scarf and a pair of shoes (kapai) or sandals (tsaplai). The Sanatia Kákars wear a kamis or shirt instead of the jábai and have also a conical cap (kulla) under the turban. A Sanzar Khél would generally wrap one end of his turban round his neck. Big trousers among the Sanzar Khéls are considered a mark of distinction, an average tribesman expending on them about 20 yards of cloth, a Sardár Khél Jogízai as much as 45 yards, while among other tribesmen about 8 yards of cloth are used. In winter sheep skin (postin) or felt coats (kosae) are worn; the Mando Khéls using generally sheep skin coats which they make themselves. The poorest among the Shiránis are content with a course blanket (sarai) round the waist and another thrown over the shoulders. The majority of the tribesmen wear nothing but white; the Shíránis, Mando Khéls, and Alizai Sanzar Khéls, however, wear black turbans.

The women have a wrapper (sarai or tikras) and a long shift reaching to the knee which in the case of married women is embroidered in front with silk and studded with shells. Among most of the tribes, a marriageable girl's dress is generally of two colours, the front pieces. being of a different colour to that of the back pieces. The use of trousers among the tribeswomen is restricted to Mando Khéls and to a few women of leading families among other tribes. Some of the Sanatia women have begun to wear trousers. Among the Shíránis a girl on her marriage wears trousers. Other women wear gaiters (paichas), which in the case of married women are green or red and of unmarried girls white. Unmarried girls of the Kamálzai section in Hindubágh wear on the forehead a red cloth band (zekán) stuffed with wool.

The rise in the standard of living has led to improvement in the style of dress among the wealthier classes, and the felt coat (kosae) and coarse cloth are being gradually POPULATION. replaced by the finer Indian piece-goods. Better materials are also used for the dress of the women.

Hair,

All the tribesmen, except the mullas who shave their heads clean, wear long hair which falls in curls on either side of the face. Elderly men among the Sanatia Kákars cut their hair short. A part of the hair of unmarried girls is made into fine plaits over the forehead and tied with a brooch (zarángae), the mark of maidenhood; and the rest is tied in a single plait at the back. That of the married women is divided by a parting, brought round the ear and made into two plaits at the back.

Ornaments.

Females adorn themselves with ornaments such as nose rings, ear-rings of silver or brass, bracelets and necklets of silver, and bangles of either silver or zinc. Young men and older men of position are particularly fond of ornamented saddlery, cheap rings set with imitation stones, and gold embroidered coats and waistcoats. Nearly every man wears an amulet or túwiz.

Married men who have no children, or whose children do not live long, sometimes wear, as a charm, a bracelet on the right arm and a silver ring in the right ear, and get a hole bored by a multá or sheikh in the ear or in the right nostril.

Dwellings.

Nomad tribes such as the Malazai, Kamálzai, Mírzai of Kazha in Hindubágh, Mardánzai and Sáfi in Fort Sandeman, and Jalálzai, except the Jogízai sardár khôl, in Kila Saifulla spend the year in blanket tents (kizhdi). A kizhdi is made of goats' hair, and generally consists of eleven pieces (tágai). The ordinary width of a piece is 3 feet, and the length varies from 15 to 24 feet. Three of these pieces stitched together form the fly, and two stitched together form each of the four side walls. They are stretched over curved wooden poles (skám). In winter the side walls are protected against rain and water by a stone or mud wall about 2 feet high, or by a wattle hurdle. In front of the kizhdi is a yard fenced in by matting or bushes.

Only the well-to-do can afford a separate kizhli for their POPULATION. flocks and cattle. In the centre of the kizhdi (gholai), the family live, and this part of the abode contains the hearth and a platform on which are placed blankets, carpets, and spare clothes, and a stand for the water skins. In another division (shpol) the sheep and goats are folded at night. whilst in a third (ghojal) larger animals are tethered. A kizhdi costs about Rs. 60, and should last for ten years. It is waterproof and a favourite mode of living, as it can be moved from place to place as may be necessary. Jalálzai Kákars of Torghar who are mostly graziers use caves for shelter and many of them do not possess even kizhdis. Many of the cultivators move from their mud huts into kizhdis in the summer, some along their fields and others in fixed encampments known as the ména. No beds or lamps are used, and the household furniture is scanty and consists generally of a few blankets, carpets, quilts, pillows, skins for water and grain, some cooking pots, and a hand mill (méchan). A variation of the kizhdi is the summer shelter, which is covered with bushes, instead of blankets and is called kudhal.

The settled inhabitants live in huts made of stones and mud, consisting of a single hut 24 feet by 12 feet in size, and costing about Rs. 30. The roof is either flat or sloping and consists of brushwood covered with mud. The single room is used for all purposes including use as a cattle shed. The well-to-do people, especially among the Jogízais, have spacious houses, with court-yards. Among the Shíránis the people generally live in stone-built houses with flat mud roofs, each hut containing a single room about 8 feet high and 10 feet square, which is occupied by the whole family. Doors are uncommon, the door-way being generally closed with a bush. The stock of furniture is very limited, consisting as a rule of a mat or two and a couple of cots made of clive wood and woven with a kind of grass called burwaz.

POPULATION. An improvement has recently been noticeable in the structure of houses in the District. Sheikh Yákúh Ismáilzai has set an example by building a large house, stone in mud, with a masjid and a guest house adjoining it, at Musafirpur. It is all his own handiwork including the doors, and the bedsteads, and is known in the country as the Sheikh bangla.

Disposal of the dead.

The method of burial usual among Muhammadans is in vogue, the body being laid north and south with the head inclined to the west. The mulla draws the kalima either on the forehead of the corpse, or on a piece of pottery or a clod, which is placed under its head. As his fees he is given the clothes worn by the deceased except the turban. There is no fixed period for mourning. Condolence and fáteh are offered by friends and relatives within the first three days, but in the case of death of females, condolence is dispensed with, except among the Sanatias. The mourning in the case of a child under four years lasts for one day only.

Two stones are generally placed on the grave of a man, one at the head and the other at the foot, and three on that of a woman, the third being in the centre; in some places a man's grave has two and a woman's grave one stone only. Long poles are erected over the graves of saintly persons as a mark of reverence.

A person who is killed at the hands of a man of an alien faith, or unjustly by one of his co-religionists, is styled a shahld or martyr. His body is placed on the ground in his own clothes, covered over with stones. and a stone hut erected over it in which a loophole is left for passers-by to look in.

Amusements and

The only indoor game is katár which resembles chess, and requires two players each having nine pieces of stick or small stones. Boys play with knuckle bones (baddai) and are fond of marbles. Of out-door games may be mentioned hénda resembling prisoner's base, and wrestling,

the latter being confined to Sanatia Kákars. Klusae POPULLATION.

a hopping game, requiring eight or twelve players, is another amusement. The well-to-do classes both shoot and course, while the poorev classes are fond of chasing tiring, and thus killing sisi or chikor. Sisi and chikor are snared, and also foxes, the last named chiefly in Hindubágh and Kila Saifulla tahsii for their skins.

Dancing (hamai or atanx) is popular among men and women on all festive occasions. The dancers move in a circle, clapping their hands and singing in concert under the leadership of one of their number. Among the Sanzar Khéls mixed dances (gada hamai), are common, marriageable girls and men dancing together; but in other parts of the District men and women dance separately. Among the Shíránis male guests at weddings perform the sword and jhúmar dances round a bonfire.

The only important festivals are the two ids, the los id and the halkai id. Horse races, tent pegging, dancing, and shooting at a mark, form the amusements on these occasions.

Shrines are ubiquitous in the District, almost every village graveyard having a patron saint, who in his life time was a village or tribal elder. Their shrines generally consist of little more than a heap of stones or a rough mud or stone enclosure, and occasionally a mud hut, surrounded by some poles to which rags, herns or bells are attached.

In the Hindubagh tahsii the best known shrines are those of Sheikh Taru Nika in the Marghzan valley, much respected by the Sargaras; and of Shah Husain Nika, an Isa Khai Kakar, at Urgassa, held in reverence by the Sanatia Kakars. The local tradition credits Shah Husain with having had horns, like a goat. The shrine of Mulla Kanail Akhund, Mehtarsai, lies at Khulgi. He is said to have predicted that on the day of his death Hindubagh would be occupied by the British, and local tradition alleges that this prediction was realised in October, 1890. Other

Shrines.

POPULATION. shrines are those of Sakhi Nika, Táran, on the bank of Yákúb Mánda, about 20 miles south of Hindubágh, who is said to have turned the melons of a field in "Hindwáno kach" into stones; Shéran Nika who in his lifetime rooted out cholera from Hindubágh; Daulatyár Nika, a companion of Dáru Nika; and among Fakírzais those of Bahlol Nika, Sikandar Nika, Lakír Nika, and Adilai Nika.

In the Kila Saifulla tahsíl the best known shrine is that of Békar Nika, who was fourth in descent from Jogi, the progenitor of the Jogízais. It is alleged that the power and influence of the Jogízais was at its zenith in Békar's time. He was summoned to Kandahár by Ahmad Sháh Abdáli. who demanded revenue from his clansmen. Békar was put in boiling water and miraculously came out unhurt. Ahmad Shah was convinced of his saintliness and gave him a sanad of exemption from payment of revenue. shrine lies at Spin Tangi, about 12 miles north of Kila Saifulla, and is largely visited by all Sanzar Khéls. shrines of comparatively minor importance are those of Jogi at Spintangi, Nawab Jogizai at Khusnob, Jhanda and Isháq Jogízai at Rod. Ismáil Smailzai at Takri, Hazár Ghorézai at Ghorézai, Saiad Muhammad Ghorézai at Toiwar, Zaid Allahdádzai at Telerai Allahdádzai, and of Mullá Sada Gul Mirzai. A hillock near the Tang Haidarzai resthouse is pointed out as the sacred spot where Khwaja Khidar sat for a while.

Important shrines in the Fort Sandeman tahsil are those of Husain Nika, Sanzar Nika, and the Takht-i-Sulaimán. The shrine of Husain Nika, a Mechan Khél fakír, is situated on the bank of the Kundar river, on the northern frontier of the District; it consists of a hut about 20 yards long by 12 yards broad and 3 yards high. There are several other shrines close by, among others of a dog belonging to the saint. According to local tradition this dog was endowed with the power of divining the number of pilgrims who were coming to visit the shrine and used to notify the same by barking,

giving one bark for each visitor. On one occasion the dog POPULATION. gave three barks and his master accordingly prepared food for three guests, but four men arrived and the saint, moved to righteous anger by what he considered was wilful deception on the part of the dog, immediately slew him, subsequently transpired that only three out of the four guests were Musalmans and that the fourth was a disguised Hindu who had falsely endeavoured to pose as a true believer. In his remorse the saint erected a shrine in honour of the dog and left it in his will that his votaries should first visit the dog's shrine and then his own. This practice is observed to the present day. The shrine is held in reverence by the Powindahs, more especially by the Sulaimán Khéls. The present keeper of the shrine traces his descent for twentythree generations in a direct line from Husain. The other men attached to the Shrine reside at Inzar about 5 miles distant and attend by turns. The shrine has a revenue-free grant at Inzar of 62 acres of land, of which 29 acres are irrigated and 33 acres uncultivable waste. Among other miracles it is mentioned that the caldron provided for cooking the sacrificial meat cannot be filled, nor can any length of cloth wholly cover up the saint's grave, except in cases when the votary's request meets with the saint's approval and the object desired by him is to be gained immediately.

The shrine of Sanzar Nika, the progenitor of the Sanzar Khél Kákars, lies at Kot in the Kibzai circle about 27 miles from Fort Sandeman, and is held in great reverence by all Kákars.

The Takht-i-Sulaimán shrine is situated on a ledge some distance below the crest on the southernmost bluff of the Kaisa-ghar mountain. It is visited, chiefly in the summer on Thursdays, by many pilgrims both Hindu and Muhammadan. In June, 1891, it was visited by the late Major McIvor, then Political Agent in Zhob, and Captain (now Major Sir Henry) McMahon, and the following has been

POPULATION extracted from an account dated the 8th of August, 1894, written by the latter officer, and published in the "Geographical Journal" for that year:—

"This mountain, which, with its sister peak of Kaisagar, forms the highest points of the Sulaimón range of the northwest frontier of India, is situated in the territory of the Shíránis, who, until brought under British centrel in the winter of 1890, were an independent and extremely troublesome border tribe. Many legends attach to it. According to some, Noah's Ark alighted here after the Deluge; while others (from this the mountain derives its name) connect it with Solomon, who, as the story goes, once came to Hindustan to marry a lady named Balkis. While returning from India with his bride in a flying throne, the lady requested Solomon to stop for a while, to enable her to take a last fond look at her native land. Thereupen the throne alighted on this peak, which has ever since borne the name of Takht-i-Sulaiman, or Solomon's throne. Ethnologically, the mountain is considered by some to have been the birthplace of the Pashtú-speaking races.

"From these and other legends connected with this mountain, the shrine situated near its summit has been for many centuries the place of pilgrimage of such adventurous pilgrims, both Hindu and Muharamadan, as were hardy enough to face the dangers of the road, through the wild tribes of the country, and the difficulties of the mountain itself. A native surveyor is said to have reached the shrine about a hundred years ago, while somewhat later two Englishmen, Messrs. Fraser and Harris, members of Elphinstone's Mission of 1809, are said to have attempted the ascent, without success. The military expedition sent to survey this mountain in 1884 succeeded in reaching the summit of the Kaisa-ghar peak close by, which is 11,800 feet and some 200 feet higher than the peak of the Takht itself. No attempt was made to scale the Takht, which was said to be inaccessible.

Daring the Shíráni expedition in December, 1890, Gene-POPULATION. ral Sir George White, the present Commander-in-Chief of India, in order to show the Shíránis that even their most remote mountain fastnesses were not inaccessible to British troops, ascended the mountain from the eastern side, accom-

remote mountain fastnesses were not inaccessible to British troops, ascended the mountain from the eastern side, accompanied by a small party of picked men, and succeeded, after some two days' hard climbing, in reaching a point on the east line of the hill, but was unable to devote the time necessary for an attempt to reach either the shrine or the actual summit.

"Major MacIvor, C.I.E., then Political Agent, Zhob, and myself determined, the following year, to attempt the ascent, and found ourselves on June 28, 1891, at the Pezai spring, on the western slopes of the range—the highest point at which spring water on that side is obtainable. At dawn on the 29th we commenced the actual ascent, and by the evening, after a hard day's climb, reached the crest line at the point where the famous shrine is situated. Here we found a couple of rough stone hut shelters erected by pilgrims, in which former visitors had each in turn left cooking vessels and supplies of flour and rice for the use of those who might come after them. The actual shrine was close by, and within a few yards, but far from a pleasant place to get at. The face of the mountain at this point on the eastern side is a sheer precipice of many thousands of feet. The shrine is some 20 feet down below the edge of the precipice, and consists of a small ledge of rock about 41 feet long by 8 feet wide, with a slight artificial parapet of rocks on the outer sides, about a foot in height. It is reached by four foot-holes cut or worn away in the rock. The hand and foot-hold is good, but the edge of the precipice appears slightly to overhang the little ledge below and the sensation therefore experienced in going down or coming up over the edge of the precipice is only equalled by that of seeing some one else do so. All pilgrims apparently do not enter this shrine, but content themselves with looking

POPULATION. down into it from above. Those who do descend leave a small token in the form of a small piece of stick, which they fix into the interstices of the little rock parapet. Both of us descended, and left our stick tokens. The look-down into space from this little ledge does not tempt one to make a very long stay there.

"The crest of the mountain at the shrine is not the highest point, which is at one of the three knob-like peaks at the south end of the crest. These we determined to ascend, if possible, next day, notwithstanding the assurances of our native guides that these peaks were quite inaccessible. After a cold night on the crest, on the ground, where some snow was still lying in patches, we commenced a hard day's work. Each of the three peaks before us was separated from the place in which we were and from each other by precipitous gaps in the crestline, and the ascent certainly did not appear hopeful. Without describing the many adventures of the day, it will suffice to say that we both succeeded in reaching the tops of all three peaks, and also, I am glad to say, in discovering a possible way down again-a matter which at one time appeared somewhat doubtful.

"This is the first occasion on which Europeans have reached either the shrine or the summit of the peak of the Takht-i-Sulaimán. No one has, as far as I know, gone up to either place since."*

The minor shrines in Fort Sandeman are those of Mír Nika at Karmánzai in the Shíráni circle; of Mullá Zamán Nika, Haripál at Niqib Khel; of Mullá Bábakar Haripál at Shínapunga; of Mullá Umar Nika Haripál at Abdul Haq Kili; and Muhammad Nika Mando Khel at Déra.

Names and titles.

Both among girls and boys many names are to be found, which are possibly of totemistic origin. They are those of animals, plants or fruits, and references to colours such

^{*} The place has since been visited on two separate occasions by parties of British Officers.

as nílaí, bay, samand, dun, zarghún green, are frequent. In POPULATION. other cases, the denominations used for men are those usual among Muhammadans, while, in the case of women, names beginning or ending with Bíbi, or Náz or expressions of value or quality are popular, such as Bakht Bíbi, Bíbi Maryam, Bíbi Aisha, Mahnáz or Náz Bíbi, Gulbashra (flower-faced), Zartola (golden), and Názuka (delicate), etc. Shortened forms of the long names given to men such as Táju for Táj Muhammad, Walo for Wali Muhammad, etc., are frequently used.

Though a girl is a valuable asset in an Afghán family, no ceremonies are observed on her birth. She is named by the mother or some female relative. The birth of a boy is announced in a peculiar manner. The woman who attends the mother shouts thrice at the top of her voice Kánros búto wárvai da faláni zoe wo so, which means, 'Ye stones and plants, listen that a son has been born to a certain (naming him) person.' Guns are then fired and there are general rejoicings. The boy is named on the third day after consultation with the mullá. The ceremony of circumcision takes place within the seventh birthday generally. In stating his name a man will generally add that of his sub-section, section, clan, tribe or other group to which he belongs. The term khán is used both as a suffix or prefix, and in the latter case it is considered a mark of honour. The word malik is applied not only to village headmen recognised by Government, but also to large land-owners and men of influence. The term sardár is strictly confined to some of the leading men among the Jogízais. But it is commonly applied by the Shíránis and Mando Khéls to their leading men, and also to other Jogízais.

Among titles possessing a religious significance may be mentioned the prefix sheikh and the suffix shah which are employed by Saiads. The term mulla and talib are applied to men, who have some pretensions to religious

POPULATION. learning, the latter being applied to those who are still under religious instruction. The descendants of mullis are known as Akhundzüda.

Rules of honoug.

A knowledge of the rules of honour (mayar) which prevailed among the people before the British occupation and which still influence the actions of many of them is not without importance from the point of view of administration, and a short reference may be made to them here. They are gradually giving way before British law and order. It was incumbent on a tribesman—

- (1) To avenge blood.
- (2) To fight to the death for a person who had taken refuge with him. The refugee was called nanawatae and was always maintained by his protector so long as he remained under the latter's roof.

Among the Shiránis an offender who is unable to protect himself from his enemy, or, in other words, when his own territory is too hot to hold him, generally takes refuge with a chief or other powerful personage belonging to some other section or tribe. The custom ("nahora" as it is called) is to take a sheep and slaughter it at the door of the person's house whose protection is claimed and who is bound to give him refuge. The offender then becomes the protector's hamsayah or neighbour, and is bound to make good to the latter any loss incurred by him in consequence of the responsibility he has undertaken. In the event of the hamsayah's death the protector's claim forms the first charge on the deceased's property. Another method of claiming protection consists in the offender tying the end of his chadar to that of the wife of some powerful personage when the latter generally affords him the succour he requires, though he is not bound to do so as in the former case. The custom of "nahora" is also employed when one man begs any great favour of another. The slaughtering of a sheep at a person's door marks the urgency of the

case and is something akin to the Hindu custom of aitting POPULATION. "dharna."

- (8) To defend to the last property entrusted to him.
- (4) To be hospitable and to provide for the safety of the person and property of a guest.
- (5) To refrain from killing a woman, a Hindu, a minstrel, or a boy who had not taken to trousers.
- (6) To pardon an offence on the intercession of a woman of the offender's family, a Saiad or a mullá, an exception being always made in case of adultery and murder in which terms weres arranged between the parties.
 - (7) To refrain from killing a man, who had entered the shrine of a pir, so long as he remained within its precincts; and also a man who whilst fighting begged for quarter with grass in his mouth or a cloth round his neck or who put down his arms.
 - (8) To cease fighting when a mullá, a Salad, or a woman, bearing the Korán on his or her head, intervened between the parties.
- (9) To punish an adulterer with death.

In pre-British days, blood had to be avenged by blood if the parties were of equal position and influence; but if the relations of the person killed were weak, the matter was compromised by the payment of compensation. In cases in which the parties belonged to the same tribe and the offender himself was out of reach, his nearest relation, viz., his brother, father or cousin was slain. If, however, the offender belonged to another tribe, it was incumbent on the aggrieved party to kill one of the section, clan or tribe to which the former belonged. Such a system was liab to indefinite extension and led to interminable blood feuds, which continued until either the authorities or friends in tervened to arbitrate. In such cases the losses on either side were reckoned up and compensation was paid to the side, which had lost most.

System of reprisals. POPULATION.

Blood compensation.

Might was right in days gone by and the position of the party aggrieved was the principal factor in determining the price to be paid for blood; hence the compensation for a mullá, a Saiad or a person belonging to a sardárkhól or leading family was considerably more than that pavable for a tribesman. The general rate among the Kákars was Rs. 1,200 and four girls; among the Mando Khéls Rs. 1,200 and two girls; Shíránis Rs. 700; and Khosti Sheikhs Rs. 500 to Rs. 700. The award of girls as compensation among the Kákars was generally made up of two girls házar (present) and two girls ná-házar, that is, not born yet. In the latter case the party whose girls were to be given when born, was nominated. The girls for this purpose were valued at Rs. 100. The compensation for a woman and for a péshewar (weaver) was generally half of the amount payable for a tribesman. The loss of an eye, a hand, ear or foot was generally counted as equivalent to half a life, the loss of a nose as equivalent to a life; the compensation for the loss of a tooth was about Rs. 50. When a murder was committed in consequence of a dispute in regard to land, a plot of land was also given, among the Kákars, in part payment of compensation.

Among the Shíránis, in cases of blood feud the quarrel is strictly limited to the actual offender; the blood money is fixed at Rs. 700 for males and Rs. 350 for females. A curious custom, which seems to be peculiar to this tribe, is that should vengeance be exacted in hot blood, i.e., immediately after the offence has been committed, no blood money is claimable, but if some time is allowed to elapse before the offended party take its revenge, then compensation is payable to the relations of the murdered man at half rates, i.e., Rs. 350 for a male and Rs. 175 for a female.

Afghán refugees, The only Afghán refugee at present (1906) residing in the District is Sáhibsáda Mír Hasan Sháh, a Hasanzai Saiad, who with eleven followers lives at Kili Sheikhán in the Fort Sandeman tahsíl and is in receipt of a monthly allowance of Rs. 100.

CHAPTER II. - ECONOMIC.

The two dominant factors which present the mselves, when considering the general conditions under which agriculture can be carried on in the Zhob District, are the presence of mountainous tracts, which can never be made capable of cultivation, and the absolute necessity of perennial irrigation to ensure a harvest. A large part of the cultivable area. moreover, consists of land, which is incapable of permanent irrigation and entirely depends on rainfall, and from this a fair crop cannot be expected oftener than once in about three Cultivation is, therefore, sporadic and dependence on anything but permanently irrigated land is precarious. largest dry crop tracts which are cultivated are those lying in the Kila Saifulla tahsíl and include Khushkába Bátozai. Khushkaba Daulatzai, Bandat-i-Alikhel, Khushkaba Ghorezai, Gwál Ismáilzai, and Gwál Haidarzai; in the same tahsíl the principal tracts which are uncultivated but culturable are those known as Pitao Mírzai, Khasnob, Pitao Daulatzai, Pitao Bátozai, Pitao Ghorézai, Sháh and Shinglúna. The best tract of dry crop land in this tabsil is Tatai, about 21 miles from Kálu Kila and included in the limits of Gwál Haidarzai. It contains about 40 large embanked fields, is said to be very fertile, and is therefore comparatively very valuable, a single band selling for Rs. 700 to Rs. 800, while similar bands in other tracts ordinarily sell for Rs. 50 to Rs. 200. and rarely for Rs. 400. Elsewhere, uncultivated dry crop tracts are found mostly in the north-western parts of the District, the principal of them being the Keshatu, Wasta. Súrzangal, and Zari Dagár. In the Fort Sandeman tahsíl dry crop area is comparatively small and is included mostly in the Kibzai, and Shíráni circles. All these dry crop areas are capable of considerable extension but as the last few years of drought have shown, their cultivation is precarious. The stony slopes at the foot of the mountains are useful only for grazing.

AGRI-CULTURE.

General conditions.

AGRI-CULTURE,

Seils.

No scientific analyses of the soil in various parts of the District have been made. In the seurse of the survey of the Hindubágh and Kila Saifulia tahsiis, the land in the irrigable area was divided into so less than twenty classes with reference to its capacity for yielding crops, the best land being dofasli harsála, that which yields two crops in a year, and the last class, yak fasli dah sála, from which a crop is raised once in ten years. To these classes were added gardens, sailába or flood irrigated land, and khushkába or dry cropland.

The cultivators base their classification on the most obvious. properties of the land. In Fort Sandeman five kinds are recognised, viz. - Sra khávri, a red loam found along the Zhobriver: tora mzakka or tora khávri, a dark koam found in the Kibzai and Abdullazai circles; both are well suited for wheat and barley crops: spina khávri or white soil found almost in every circle and suited for the cultivation of millet (china): sagwasta or sangwasta, a soil containing gravel and occurring in Gustoi, Shiráni, Abdullazai, and Mando Khél circles; and sharana or saline soil of which very little is found except here and there along the Zhob river. Sagwasta is inferior soil and requires manuring to give a crop; maize is cultivated in it; china and mung (Phaseolus mungo) are sown in the skarana. In the Kila Saifulla tahsil six kinds of soil are known: pakha which is the best, is composed of rich clay; atana, also called matana, which comes next and answers to the mat in other parts of Baluchistan, i.e., a soil made by silt deposits; sagana, a sandy loam which requires frequent watering; sharamugh, a soil of saline composition; klaka, a hard soil and righa, containing gravel and shingle, both the last named being inferior and not ordinarily fit for cultivation. Pakha is found in Ismáilzai, Ghorizai, and Haidarzai; the atana in Pasénzai, Akhtarzai, Alozai, and Ali-khél; the sagana in Bátozai, Sibzai, Ghibzai, Zarkae and in Mírzai and Shádozai villas which last two contain also the sharamligh; the klaka is met with north of the Lora and the ragha in Saghra

AGRI-CULTURE.

and towards the Fitao hill. The Kindubagh tahsil has three kinds of soil called pakha-spina, réti or sagna, and dabarlana or shaghlana. The pakha-spina, as the name implies, is a rich white loam found in the Hindubagh circle at Urgasa, Kárézgae, and Loe Káréz; at Kazha and Shina Khura in Kazha circle; in the Khurásán circle, mostly in uncultivated tracts; in Murgha Mehtarsai circle, at Murgha and Kanr Mehtarzai : and in the Babu China circle at Babu China. Murgha Fakirzai, and Zhar Ghézh. The réti is a sandy soil suitable for the ghosht (millet) crop and is found at Kam Káréz in the Hindubágh circle and at Shina Khura in Kazha. The dabarlana is an inferior stony soil containing gravel and is found mostly in the Babu China circle, also at Rod Kamchughai in Murgha Mehtarzai. It does not ordinarily give a crop without manure.

The rainfall is scanty and variable, the average for twelve years (1898-1904) at Fort Sandeman being 9.55 inches; and for and system of cultivation in the last four years at Hindubagh and Kila Saifulla 4.92 inches relation thereand4.15inches respectively.* Most of the rainfall in Hindubágh is received during the winter between October and March, the latter being the rainiest month. The average summer rainfall between April and September covering the number of years mentioned above is 5.58 at Fort Sandeman, 0.98 at Hindubágh and 2.32 at Kila Saifulla. The heaviest rainfall during the year is at Fort Sandeman and takes place during the months of July and August. The rainfall in the District is, like that of the rest of the highland parts of Baluchistán. uncertain and this is a factor in agricultural life with which the cultivator has constantly to reckon. Thus, for instance, in Fort Sandeman during the ten years ending 1905, the three years 1899, 1900, and 1905 were bad years as regards

Rainfall

^{*} With reference to the figures for Bindubagh and Kila Saifulla it must be taken into consideration that the four years during which the records have alone been kept were years of exceptional drought. It is therefore probable that in normal years the difference in the rainfall at Fort Sandeman, Hindubagh, and Kila Saifulla is not so great as would appear from the figures now given.

AGRI-CULTURE.

rain. "A good rainfall," wrote Mr. Crawford, "naturally affects, not only the amount of rain crop cultivation, but also the irrigated land, and the springs, streams, and karezes which supply the water for irrigation." To the flockowner it is of great importance and provides abundant pasture for his flocks. If good rain or snow falls between January and March the sources of perennial water maintain a sufficient water supply for the spring harvest and the summer rainfall again replenishes them for the autumn The rainfall received between July September is also utilized by reserving the moisture in the ground for sowing the spring crops in the autumn; it greatly benefits the irrigated autumn crops. The rainfall between December and February is beneficial to the wheat crop sown in the previous autumn. The spring rains in March and April benefit the irrigated rabi or spring crops while wheat in unirrigated land largely depends on them; showers received in the following month (May) besides being essential to mature the spring crop (rabi) in dry crop lands (khushkába) are useful for sowing juári-in unirrigated land which matures with the summer rains. For purposes of dry crop cultivation the lands are embanked, the cultivated plots being known as bands. These bands are filled with rain or flood water in the summer or winter, after which they are ploughed and the seed is sown. When moisture is to be retained for a crop to be sown later, as is the case for the rabi crops after the summer rains, the land is ploughed deep and harrowed smooth.

Irrigated and unirrigated areas in the District and sources of irrigation.

Table IV, Volume B, shows the irrigated and unirrigated villages in the District with their sources of irrigation. Of the 269 villages, 182 are wholly irrigated, 57 are partly irrigated while 30 have no permanent source of irrigation. The sources of irrigation are 586 and include 26 streams, 123 kárézes, and 487 springs.

Details of cultivable and irrigable areas with sources of irrigation in the Hindubágh and Kila Saifulla tahsíls, which

have been partly surveyed, are given in table V, Volume B. The following abstract shows the areas in 1904-05:-

AGRI-CULTURE.

Tahsil,	Total area sur- veyed.	Unculti- vated.	Culti- vable.	Irri- gable.	Khush- kába, *
Hindubágh Kila Saifulla	 Acres. 33,029 30,307	Acres. 14,604 8,574	Acres. 18,425 21,733	Acres. 17,901 21,584	Acres. 524 199
Total	 63,83 6	23,178	40,158	39,435	723

A considerable proportion of the indigenous population Population is dependent on agriculture, and many of the Kakars, dependent on Mando Khéls, Shíránis, and the Sáfis combine flockowning The best cultivators are the Mehtarzai, Isa Khél, Fakírzai, Mardánzai in Hindubágh, Haidarzai and Mírzai in Kila Saifulla and the Mando Khél in Fort Sandeman.

Two principal harvests are recognised, viz., the spring or Sowing and rabi locally known as dobae, and the autumn or kharif called harvest times manac. The former (rabi) includes the crops sown between October and middle of February and reaped by the month of June: the autumn harvest (kharif) includes the crops sown from April to July and reaped by the month of October. In Hindubágh where the climate is colder than in other parts of the District the rabi sowings continue till March and the harvest comes in June and July. Similarly, the kharif harvest extends up to November. The following are the principal crops produced at each harvest :-

Rabi.

1. Wheat (Triticum sativum).

2. Barley (Hordeum oulgare).

Kharif.

- Maize (Zea mays).
- Juári (Andropogon sorghum).
- 8. Ghosht (Panioum Italicum).
- 4. Azhdan (Panicum miliaceum).
- 5. Rice (Oryza sativa).

^{*} This represents only the area within the limits of irrigable mahals or

AGRI-CULTURE.

The largest and the most important crop is wheat which forms the staple food grain of the people. Of other food grains maize, juári, azhdan, shosht, barley, rice, and murte (Phaseolus mungo) are cultivated. Lucerne (Medicago sation) is only grown in small quantities and is classified as a kharif crop. It is sown in April and May and the crop once sown lasts for four years with sufficient irrigation and manure. Amongst miscellaneous crops, included in the khurif harvest are pálézát (cucurbita), tobacco, potatoes. carrots, and enious, the cultivation in each case being insignificant. Table VI, Volume B, gives the details for three years of areas under principal crops in the two tahsils which have been surveyed. In 1904-05 the area under crops in the Hindubigh tahsil, excluding 31 acres under gardens, amounted to 6,135 acres, viz., 4,989 acres under rabi and 1,146 under kharif, the areas under the principal crops being wheat 4,487 acres, barley 502 acres, maize 752 acres, and millets 294 acres.

In the Kila Saifulla tahsil the area under crop was 10,682 acres, excluding 26 acres under gardens; the rabi crops covered 8,651 acres and comprised 8,055 acres of wheat and 596 acres of barley, while there were 2,031 acres under tharif, including 624 acres juári, 306 maize and 1,064 acres of millets. Area under each crop is not available for the Fort Sandeman tahsil but the revenue * realised in kind during 1904-05 indicates that the principal rabi crops are wheat (Government share at one-sixth of the produce 4,119 maunds), barley (545 maunds), and in kharif, maize (1,480 maunds), and sháli or rice (840 maunds).

Staple food grains. Wheat. Two varieties of wheat are grown in the Hindubágh tahsíl, viz., the sára ghanam or winter wheat, which is white, and tauda ghanam or summer wheat, which is red and has a smaller grain. In Kila Saifulla two varieties are found—sra or red, and spin or white wheat; the red variety is largely cultivated and is also common to Fort Sandeman,

^{*} Vide table XVI, Volume B.

AGRI-

where three more varieties are recognised—tor ghanam, orbasin ghanam and ghat ghanam, all being indigenous to the country. The tor ghanam has a longish hard grain, yellowish in colour, the ear being dark, whence the name. The orbasin ghanam is reddish in colour, the grain is small and soft and the ear long but thin and yellow in colour. Ghat ghanam has a beardless car which is thick but small, the grain being yellowish. All are cultivated equally in different parts of the tahsil and the sowing operations extend from October to end of January.

Early in the spring, after the rains, the land to be tilled is ploughed over once, the first ploughing being called máta. In the following September the land is cleared of bushes (khwa) and is watered for the first time. This first watering is known as nawa or kur. When the surface of the soil has dried and has assumed a whitish appearance, the seed is sown broadcast (pargina) and it is then ploughed and harrowed. In Kila Saifulla no harrowing is ordinarily done. In the Fort Sandeman tahsil when the cultivator possesses an insufficient supply of water and gets his turn of water after long intervals seed is sometimes sown broadcast in dry land which is ploughed and harrowed and subsequently irrigated. Such cultivation is known as sama khák. After two or three days the land, which has been sown, is divided into small beds (kurdae). Wheat sown in September sprouts in seven and that sown in October and November in fifteen or twenty days, while that sown in December to February comes up in March.

The first watering (kharkówa, lútakashal, or sama) takes place about forty days after sowing, and the second watering after another ten or twelve days. After this no further irrigation is required for about two months on account of rains in January and February. Subsequent irrigation depends on the water supply available. Ordinarily five waterings after sowing, the first two as above and the other three at intervals of fifteen to twenty-five days commencing

AGRI-CULTURF. from March, mature the crop, and these in consecutive order are locally known as sama, prepanr, drémandae, rakhsat, and spargha.

In February and March wheat is in some places browsed by goats, sheep, and horses, and this causes the plants to spread. In the end of April and beginning of May if an cast wind (purkho) blows on rainy days the crop is liable to rust (surkhi). But if the rain is followed by a westerly wind (barvo) rust does not appear. When rust attacks the crop the aid of the multás and Saiads is sought. At the los akhtar (Id-uz-zuha) when sheep or goats are sacrificed, every cultivator of ordinary forethought dips a piece of felt in the blood and puts it quietly by for use on the appearance of rust, when he places the piece of felt at the mouth of the water channel which irrigates the field, and believes the rust will vanish.

When the crop is fully ripe it is cut with sickles and collected into a heap. Threshing (ghobal) is done in the ordinary way by bullocks; and in some parts by camels. A long pole is placed in the ground in the centre of the threshing floor and ten or fifteen bullocks are driven round it to tread out the grain. Winnowing is done first by the pronged fork (chárshákha) and then by trapae, a wooden spade. The cleaned heap of grain (riása) is then divided.

Dry crop cultivation. The system of dry crop land cultivation (wachobgi) is simple. Embankments of fields are repaired in June and July, and if filled with rain or flood water they are ploughed and harrowed smooth in August and September. The sowing season extends from October to end of March. In Hindubágh sowing is broadcast, the land after the seed has been sprinkled being ploughed and harrowed. Elsewhere, if the moisture is deep the land is ploughed (dohaliza) and harrowed and the seed sown by drill (nálai) in October and November. Cultivation is sometimes continued as late as March if there has been heavy rain or snow. The crop matures with the help of the spring rains which occur in April and May.

The method of cultivation of barley is the same as that of wheat. In Kila Saifulla the seed is sown from middle of February to middle of March, and in Hindubágh up to end of March. The crop is harvested in May. Since the British occupation there has been considerable increase in barley cultivation in Kila Saifulla.

AGRI-Culture.

Barley.

Maize.

Maize is known as badaghar juári or makián. It is cultivated in all parts of the District, almost exclusively in irrigated lands, and it forms the principal kharíf crop in the Fort Sandeman tahsil. It is of two kinds— white or spin and yellow or zhar. The sowing season lasts from May to July. That sown in May is called sára, while that sown in June and July is known as tauda, the former crop being known as zárae and the latter as bobazh.

The usual method of cultivation is for the land to be ploughed in March and, where the soil is sandy, it is also manured before ploughing. A second ploughing is done in April, while some plough the land a third time also in the same month. Early in May the land is watered. The surface dries in four or five days, when the seed is scattered broadcast and ploughed in, the ground being afterwards harrowed smooth. The fields are then divided into plots for purposes of irrigation. The seed germinates in four or five days. When all the plants are in leaf the crop is called zúka. At this stage the plants are sometimes affected by a worm, known as chiniai, especially in manured fields, but immediate watering destroys them. Ordinarily the first watering (kharkawa) takes place twenty days after the leaves have made their appearance, the second ten or fifteen days later and subsequent waterings take place at similar intervals, if possible. Delayed irrigation at the time of the second watering is injurious. The crop sown in May is in ear in July, and that sown in June and July gets ear (khuti) in August. About a fortnight later the ears begin to form and the crop is known as shirdar. The crop ripens at the end of September and is harvested in October. The ears

AGRI-CULTURE. are separated from the stalks and when dried are either beaten with sticks or are threshed by bullooks.

Jugri.

Juári (Andropogon sorghum) which is also known as targharijuar or duzar to distinguish it from maize, is ordinarily sown in irrigated lands from May to middle of June, with the spare water from the wheat crop. The method of cultivation resembles that of maize. The crop is generally sown in fallow land which has been previously ploughed in March unless it possesses extremely fertile soil such as that found in Kazha and Shina Khura in Hindubágh. About a fortnight after the seed has germinated the crop is irrigated. the second watering taking place after a similar interval. Irrigation in August is necessary when the crop is about 11 feet high; in September it is half ripe and in October it matures and is harvested. The ears are cut, the stalks (karaba) being left in the ground. Juari sown as green fodder is cut before it is in ear.

Dry crop cultivation. The cultivation of juári generally takes place in unirrigated land, especially in the Kila Saifulla tabsíl where it is confined to such land. In this tabsíl the embankments are prepared in March and the fields after they have been filled with rain or flood water, are ploughed deep and harrowed smooth to retain the moisture. The seed is sown by drill about the 15th of April, and sowings continue till the end of the month. If rains fall late in April and May, the seed is sown broadcast. The unirrigated crop depends on the summer rains from July to September. The crop sown in April is liable, about the month of June, to an attack by a worm called larama which eats up the roots. Timely rains in May kill the worm. The crop ripeus in September and is harvested by end of October.

Millets.
Azhdan and
ghoshi.

Millets comprise two varieties, viz., azhdan and ghosht. The method of cultivation resembles that of maize. Azhdan is the only autumn crop in the irrigated areas in Kila Saifulla and is widely cultivated in the Hindubugh tahsil, mostly in Kazha, Khurásán, and Búbu Chína circles. It is

AGRI-

CULTURE.

bardy and grows well even with little moisture and is, therefore, largely cultivated in years of scanty rainfall. When water is available from the wheat crop in June and July, sowing is commenced, the operations lasting during July in Kila Saifulla and extending up to middle of August in Hindubágh. The crop ripens in September in Kila Saifulla and a month later in Hindubágh. It is threshed on the same day on which it is cut. Boiling water put over the harvested bundles accelerates the removal of grain from the ears prior to their being threshed by bullocks. The stalks (palála) are a poor foddor. In unirrigated lands also a little cultivation is done after the summer rains in July.

Ghosht is cultivated only in irrigated lands and is confined to the Hindubugh tahsil. The crop is popular with the poorer cultivators as it gives a large produce in grain and can be raised from all kinds of cultivable land. It is of two varieties, viz., spin glosht which is white with a bigger grain. and kharai ahosht which is of reddish brown colour. These varieties are sown with sura and tauda maize, respectively. The crop ripens and is harvested in October. The stalks are called hanganr and are useless as a fodder.

Rice is cultivated in the Fort Sandeman tahsil on Rod-i- Rice. Zhob, Rod-i-Khaisara, and Rod-Viala. Three varieties are known, viz., spini soli also called spini wrizi, landai soli, and tori soli. The first and the second are white varieties, the grain of the latter being somewhat larger than that of the former, which is however more widely cultivated. The cultivation of the third variety tori soli (red rice) is small. Spini soli is cultivated from middle of April to end of May and is harvested in October; the other two varieties are cultivated after the wheat crop has been cut and are harvested in September. The ground required for rice cultivation is divided into plots (kalue) which are ordinarily 20 by 10 yards. These are flooded and kept filled with water for four or five days when they are ploughed. Three or four bullock loads of the plants known as spanda

AGRI-

(Peganum harmala), and khamazurae (Withania coagulans) are now spread over each plot and trampled in by bullocks, the process being known as ghoimand. The mud is again disturbed with hands and feet; this is called psha. The plots are again filled with water and left over for a night. The following morning the seed, which has previously been put in a bag and soaked in water for five to ten days and has germinated, is sprinkled (parguna) in the field, which is irrigated. Three or four days after sowing the field is flooded, and a few days later when the plants have grown each plot is weeded of grasses, etc. When the plants are about a foot high, such parts of the field as have a thick growth are thinned and the plants so taken out transplanted (nazún) in places where the crop is scanty. Weeding (lalún) is done ordinarily every week. Rain or flood water is turned on rice fields with great advantage. A rice crop needs constant irrigation. Bundles of the harvested crop are taken to the threshing floor and placed with their tops upwards. When dry, threshing is done by bullocks and the stalks (nár) are separated. A disease known as tor ranz sometimes attacks the rice crop on account of over irrigation by flood water impregnated with silt. The stalks become black and the plant gets no ear. No remedy is known. The local rice is of a poor quality. Experiments have been made with a better seed, but these have been unsuccessful and the land does not appear to be suitable for crops of a superior kind.

Manure, fallows and rotation.

Manure (sarah or ambár) is used in all irrigated lands, more especially in the small tracts on hill sides watered by springs (tsakhobai), but not in localities where the land is particularly fertile or where the amount of land is more than the supply of water and the land is consequently allowed to lie fallow for long periods. The use of manure in Hindubúgh and Fort Sandeman is more common than in Kila Saifulla, and consists of the dung of sheep, goats, and cattle. Sweepings and refuse of houses are also used for

AGRI-OULTURE

the purpose. The land is ordinarily manured for wheat and barley and after these crops have been cut the autumn crops are occasionally sown in the same land without manure. Reference has been made already to the plants used for manuring the rice fields. Dry crop lands are cultivated every year provided there has been a rainfall. The system of fallows in irrigated lands is simple. Lands in each village are divided into a number of plots (awara) which are cultivated by turns. The number of these awaras varies from one to eight in different parts, but the usual number is two to four. In the course of the survey of the Hindubagh and Kila Saifulla tahsils irrigated lands were classified according to their capacity for yielding crops, the best class being the dofasli or cropped twice in a year and the inferior, yakfasli dahsala, or cropped once in ten years. The area of the land cropped twice in a year was comparatively very small, being 178 (out of a total of 21.678) acres in Kila Saifulla, and 93 acres (out of 17,849) in Hindubágh. The largest areas surveyed fell under the following classes:-

		Kila Bai- fulla	Hindubágh.
		Acres.	Acres.
Croppe	ed once in four years	3,506	1,097
. ,,,	once "three "	3,415	1,805
"	twice " four "	3,129	
22	once ,, five ,,	. 2,938	981
92	twice ,, ,, ,	. 1,821	
"	,, ,, three ,,	. 934	
79	once " eight "		8,998
***	,, two ,,		1,519
	twice , two ,		846

AGRI-CULTURE. There is no fixed system of rotation of crops. Ordinarily after wheat maize is sown if the land was manured, otherwise mung or azladan may be cultivated. This practice is almost uniform everywhere. For the cultivation of rice, lands are generally divided into two parts one of which is sown with rice successively for three years and the other with wheat. In the fourth year the latter plot is sown with barley and then the order is reversed, that previously under vice comes under wheat and vice versa.

Out-turn.

The following statement shows the results of crop experiments giving the out-turn per acre of the various crops in the different tabsils:—

,	Fort Sande- man.	Kila Sai- fulla.	Hindubágh.
	Maunds	Maunds.	Maunds.
Wheat.	,		
Irrigated and manared	12	16	1.7
Irrigated but unmanured	8	9}	153
Unirrigated	61	•••	•••
Barley.	5½ to 8	•••	•••
Juári.	•		
Irrigated and manured	9	18	
Irrigated but unmanured	8 1	14	
Unirrigated	8 1	9	1
Maize.		}	,
Irrigated and manured	9	•••	21 12
Irrigated but unmanured	8 1	15§	188
Unirrigated	81	•••	104
Azhdan.			
Irrigated and manured		22₹	1848
Irrigated but unmanured		16:1	10
	1		1

AGRI-CULTURE.

The fruit trees indigenous to the country in pre-British days were the sanzalai (Elæignus hortensis), aprient of a Fruit poor quality, mulberry, and inferior kinds of grapes. These duction. were found only in a few well watered places such as the Kamchughai glen in Hindubagh. Since the occupation of the country, in 189), attention has been paid by the local authorities to fruit and vegetable culture and Government gardens have been established at Fort Sandeman, Shinghar, and Hindubagh at the expense of local funds and serve as object-lessons to the indigenous cultivators. The fruit trees in these gardens include almonds, apricots, mulberries. peaches, quinces, pomegranates, plums, damsons, grapes, figs, apples, and pears. In 1904, 260 fruit trees were distributed among the headmen of the Lower Zhob sub-division. and the number of fruit and other trees distributed in 1905 in the Zhob District amounted to 2.180. Among the local population appreciable efforts in fruit culture have been made in the Kila Saifulla tahsil by the two leading sardars. the late S. B. Nawab Bangul Khan and S. B. Muhammad Akbar Khán; the garden planted by the former contains about 8,000 trees of several kinds, principally apricots (zardátu), damsons (alûbukháru), quinces (bihi), peaches (shaftálu), nectarines (shalil), pomegranates (anár), apples (sób), almonds (bádám), plums (alácha), mulberries (tát), and grapes (angur). The last named are of several kinds viz. -- sra, sahibi, spin kishmishi, haita, tor, amiri, tandan, and kháya ghulámán. The tribesmen have followed these examples and gardens are increasing, but there is scope for considerable improvement. The total area under gardens in the Hindubagh and Kila Saifulla tahsils in 1904-5 was 31 and 26 acres, respectively. Experiment has also been made by S. B. Bangul Khán in his garden in the cultivation of the pistachio tree (Pistacia vera) which is expected to yield fruit in about eight to ten years.

^{*}A detailed account of viticulture is given in the Quetta-Pishin District Gazetteer, pages 108-113.

Melons.

In recent years there has been a considerable extension of melon cultivation and melons are now grown in villages round Fort Sandeman, near Murgha Mehtarzai, and at Hindubagh and Babu China, chiefly for local consumption. In some places Kundahári pálézwáns who are experts in melon cultivation have been employed. The indigenous method is to sow the seed broadcast (pargina), to plough and harrow the land and divide the field into beds. The system which has been introduced by the Kandaháris is called the chari or jowaki. The land is ploughed three or four times and trenches (jo or chari) made, a space of some 4 to 6 feet of level ground being generally left between the trenches over which the melons may trail. The seed is sown on both sides of the trenches. The melons are sown in April and May and begin to ripen in July and the crop is over by the end of September.

Kitchen vege-

The use of kitchen vegetables is unknown to the native population. In Hindubágh the wild plants known as bushka (Lepidium draba) and shézqi are sometimes used as vegetables. In the Government gardens already mentioned vegetables of various kinds are grown. They include potatoes, carrots, onions, púlak (spinach), búnjan (egg plant), kadu (pumpkin), méthi (Trigonella foenumgraecum), cucumbers, gourds, karêla (bitter gourd), múli (radish), shalgham (turnips), matar (peas), bhindi (ladies' fingers), and thum (garlic). Carrots are also grown by the cultivators especially in Hindubágh by the Nas Khél and Mardánzai Kákars, who export them to other parts where they are bartered for grain. Carrots known to the natives as zardaka, are of three varieties-red (sra), yellow (zhara), and white (spina). The seed is imported from Quetta. After the spring rains the land is ploughed twice and harrowed, all clods being well broken. It is then divided into small plots, which are filled with water and the seed which is mixed with earth is aprinkled

^{*} For further deta'ls see pages 118-119 of the Quetta-Pishin District Gazetteer,

over the ground. On the third day the plots are again flooded and irrigation continues at intervals of three or four days till the sprouting is complete. Henceforward the plants are watered every eight or ten days. The roots mature in August but are left in the ground till September.

Lieutenant R. A. Wahab, of the Survey of India, who visited the District in 1884, during the first Zhob expedition, described the Zhob valley as follows:—

fertile soil, and at any rate, near the river, a constant supply of water, but its advantages of soil and climate seem to be entirely thrown away on its present inhabitants, and the few square miles of well-cultivated fields near Sháh Jahán's village and at Hindubágh only bring out in stronger contrast the utter desolation of its general aspect. There is a little cultivation under the hills on both sides of the plain, where the water of a hill-torrent

can be turned to account, and near Shah Jahan's village and those of the principal chiefs a few square miles are irrigated by water brought from a long distance in kårézes, but otherwise the valley is uncultivated waste closely

In the Material Progress Report of the Zhob District for the decade ending 1901, Major Stuart H. Godfrey, Political Agent, wrote:—

resembling the foot of the Déraiát."

"It is difficult to form an accurate estimate of areas, as no records are available. But owing to peace and settled administration and by aid of takávi advances, the area of cultivation must have increased, as is the very distinct impression of officers who like myself knew Zhob in the first days of the Agency. Melons and potatoes are grown in large quantities now round Fort Sandeman, and certain headmen have commenced to plant fruit gardens."

Exact figures are not available for the District as a whole to illustrate the extension in cultivation. In the

AGRI-OULTURE.

"It is throughout an alluvial plain, with apparently a Extension of cultivation.

two tahsils, the irrigated makals of which have been surveyed, the area under crops in 1901-02 in Kila Saifulla was 8,998 and in 1904-05 10,708 acres. The figures for the same period for Hindubugh are 6.159 and 6.166 acres, respectively. Considerable increase has taken place in dry crop cultivation, more especially in Kákar Khurásán. After the boundary had been settled by Captain (Sir Henry) McMahon's Commission, Captain Archer, Political Agent, Zhob, visited Kákar Khurásán in 1895 and arranged for the cultivation of certain tracts of land. The chief places, he reported, where there were good prospects for cultivation, were Wasts, Walls, Mali Khél. Gulwana, Kánrokai, Késhatu, Doma, Pálézgír, Ghazlúna, Tirkha, Tirkhawar, Nukur, Girdi Jungle, Súr Jungle, and Tirkha (2) near Girdi; all of these, except Doma and Nukur, which entirely depended on rain, had springs, wells, or streams for irrigation. The majority of these lands had never been cultivated for a very long time, but a number of tribes of Upper and Central Zhob grazed over them regularly every summer, and each tribe had thus, in course of time, acquired certain more or less definite rights to particular springs and tracts of country. During his tour Captain Archer effected a distribution of the lands as under :--

Walla, Gulwana, and #th of Wasta... ... Bátozais. Mali Khél, Késhatu, Kánrokai and 1th of Wasta... Mardánzais. ... Daulatzais. Doma. ... Jalálzais. Pálézgír Ghazlóna ... Alozais. Tirkha ... Malezais (Mirozais). Tirkhawar Mullá Nasrín, Jajálzai, who 100 had been cultivating this land for the previous four

years.

Nukur ... Akhtarzais. Girdi Jungle Sár Jungle, and

AGRI-CULTURE.

Tirkha (2) near Girdi ... Ghorézais.

All the tribes agreed to bring their lands under cultivation within a period of two years and also that if any of them failed to cultivate their lands within that time it would be open to Government to grant them elsewhere if desired.

The local reports show that in Fort Sandeman cultivation has extended mostly in the Mando Khél and Shíráni circles especially of barley, maize, and pálézát (melons, etc.). Reference has already been made to the impetus which fruit cultivation has received and to the production of vegetables at and near head quarter stations.

Appendix IV contains a list of the implements used in Agricultural implements, the District. The principal are the plough, which is known us kal or vivi; the plank harrow or scraper (qhoidal or thál) with which embankments are made; and the clod crusher, or log used in place of a roller for breaking clods and smoothing the ground, known as mála. Among minor implements may be mentioned the rambae or weeding spud; the lutmar, a wooden mallet for crushing clods; the dal or wooden spade worked by two men with a rope for making small embankments; the sickle (lor) for reaping; four or two pronged fork (chárshákha and dowakhulyi); the trapas or drapas, wooden winnowing spade; and the rake (pára) for collecting the grain and straw scattered on the threshing floor. There has been no appreciable improvement in these implements.

Appendix V contains a list of the principal agricultural and flockowner's terms used in the District.

The Land Improvement Loans Act XIX of 1883 and Agricultural the Agriculturists' Loans Act XII of 1884 have not been advances. applied to the Agency, but rules to regulate such advances have been promulgated under the executive orders from the Government of India, and are embodied in the Baluchistán

Takávi Advance Manual, 1902. The question of the extension of these Acts to Baluchistan and the revision of the existing rules is under consideration (1905). The annual grant for the whole Agency is Rs. 60,000, of which Rs. 9.000 are allotted for the Zhob District. The Political Agent is under the existing rules (1905) authorised, within the limit of his grant, to sanction advances not exceeding Rs. 1,000 in each case, and the Revenue Commissioner up to Rs. 8,000; the sanction of the Local Government is necessary for advances in excess of this amount. The ordinary rate of interest is 1 anna in the rupes or 61 per cent, per annum, but in a case in which the Political Agent is absolutely satisfied that the project is a sound one financially, and is likely to lead to an increase of revenue, which, within the term fixed for the complete repayment of the advance, will amount to not less than the whole interest ordinarily chargeable under the rules, he is at liberty to grant the advance free of interest. The advances can be granted either for works carried out by the Political Agent himself or by the agricultural population. During the years 1897-98 to 1904-05 advances amounting to Rs. 50,115 have been granted under the Land Improvement Loans Act, and Rs. 31,478 under the Agriculturists' Loans Act. the recoveries during the same period being Rs. 34,566 and Rs. 29.455, respectively. The total balance outstanding at the close of the year 1904-05 amounted to Rs. 23,236 which included Rs. 21,371 under the Land Improvement Loans Act and Rs 1,865 under the Agriculturists' Loans Act. Details by tahsils for each year are given in table VII, Volume B. The greater part of these loans has been utilized in Hindubagh and Kila Saifulla (Rs. 67,942). The advances are ordinarily given for sinking new kárézes, repairing and improving old ones, digging water channels, making embankments (bande). and in times of drought and scarcity for the relief of distress and the purchase of seed and cattle. Repayments of advances are usually recovered by half yearly instalments. Recoveries

are usually made on due date, and it is very rare that suspension of an instalment is applied for. Suspensions are however granted if the borrower can show good reasons for the same. There have been no cases during the ten years ending 1904 in which advances have had to be written off. In the Hindubágh and Kila Saifulla tahsíls advances are, unless some special reasons exist for exemption, generally made at the usual rate of interest, viz., 64 per cent., and the zamindars offer no objections to its payment. In the Fort Sandeman tahsil, however, advances have up to very recently been granted free of interest. This practice is now being stopped except in special cases.

During the twelve years ending with 31st March, 1905, the important measures, all in the Kila Saifulla tahsil, for which takávi advances were granted free of interest were:construction of a band across the Lohra (Zhob river) at Toiwar (Rs 4,300); re-alignment of the Kálu Kila Káréz (Rs 2,000) and improvement of the Kamki Viála Káréz (Rs 2,000).

In the Material Progress Report of the District for 1891- Agricultural 1901, Major Stuart H. Godfrey, Political Agent, remarked: indebtedu css. "There is practically no agricultural indebtedness in the Lower* Zhob sub-division but in the Upper*Zhob sub-division it might be estimated that about 60 per cent of the people are in debt at an average indebtedness of Rs 200. The causes are chiefly -(a) debts to Hindu shopkcepers. more especially among the higher classes and those in Government service; (b) from excessive mortality during epidemic disease and from debts incurred during bad harvests and seasons of severe drought; (c) payment of sale prices of girls (locally called walwar) in marriage is probably the principal cause of indebtedness in the District. A man having only sons and no daughters will be fairly on the verge of ruin; (d) adultery, a common crime and which usually ends

AGRI-CULTURE.

^{*} Lower Zhob and Upper Zhob included then also the Musa Khel and Bori tabails, respectively, which are both now parts of the Loralai District.

in payment of a heavy fine to injured parties; and (e) hospitality carried to extreme and absurd lengths especially among the poorer members of the sardárs and more important clans." The recent years of drought and scarcity have, it is feared, increased the general indebtedness of the people and more especially in Central Zhob, where for three years there were practically no khushkába crops (1906).

As a rule the cultivators do not go for loans to the Hindu bania but finance each other and the interest is not charged in a direct form. For religious reasons the orthodox will not pay interest in cash, but have no scruple about paying its equivalent in an indirect form. In Fort Sandeman, however, the case is different with the Haripáls and Shíránis, among whom a unique system called rivi is in vogue, whereby interest is charged in a direct form on cash loans taken by tribesmen proceeding to Afghánistán in April for importing asafortida. On their return, which takes place in October or November, the loan is repaid with interest at 4 annas per rupce, but if repayment is delayed till their return from India where the asafœtida is sold, the rate of interest is 8 annas on a rupee, the two forms of interest are known as vinza vávízi and shapazh pávízi respectively.* Another method known as thán is also current in the Fort Sandeman tahsíl both among the Haripáls and Shíránis as well as other tribes. Under this, the lender sells nominally a piece or than of cloth at a rate higher than that prevalent in the market, and advances the market price to the borrower who on return from Afghánistán has to pay the higher rate agreed upon. The well-to-do among other tribes in this tahsil keep a supply of coarse cloth for sale to their poorer brethren at a fictitious value which is agreed upon and paid at time of harvest. The system most prevalent among the cultivators in all parts of the District is that known as salam under which advances

^{*} These terms literally mean 5 paolis or 6 paolis (paoli is a 4 anna piece) that is to say either Rs. 1.4 or Rs. 1.8 are to be paid for a rupee borrowed.

AGRI-OULTURE,

of grain are made and the loan is repaid at a fixed rate at the next harvest, this rate being generally much higher than that current at the time of loan. Thus in November and December when the stock of grain is diminished if a man obtains a loan of 27 kásas when wheat is selling at 3 kásas to a rupee, he will agree to repay at the rate of 5 kúsas to a rupee; and if the loan is taken later, in February and March when the stock of grain is still lower, and if the current rate be 3 kásas to a rupee, the actual calculation will be made at 2 kásus to a rupeo, the payment to be made in cash at harvest or in grain at the rate then prevailing. In Hindubágh the Hindu shopkeepers sometimes make advances grain on the salam system while some levy interest at one anna per rupee per month. The transactions among cultivators are negotiated verbally, but invariably in the presence of two or three witnesses. The village mulla may sometimes be called upon to write a short note of an agreement without any other formality. Special loans are sometimes granted by Gov orement to help the leading men in financial difficulties and to enable them to purchase land. The rate of interest and instalments by which loans are repayable are determined on the merits of each case. Such loans were granted in 1898 to S. B. Bangul Khán (Rs. 4,000); in 1899 to S. B. Muhammad Akbar Khán (Rs. 6,000); and in 1901 to Irán Khán, Sargara (Rs. 2,000).

In his report on the Material Progress of the District referred to above the Political Agent remarked that owing to there being no records of the transactions of sales and mortgages it was difficult to supply any accurate information, and added that "such transactions do not appear common and are usually arranged verbally amongst the people of the country and settled by the sardárs or village heads." Mortgages (adáb), known to the Shíránis and Mando Khéls of Fort Sandeman as oriyat, are of a simple character. The usual conditions are for the mortgagee to advance the loan, enter on possession of land, enjoy the

Sales and mortgages of land,

produce and pay the revenue till redemption, which can be claimed after the crop sown has been raised. The mortgage money is about half the value of the land. In Kila Saifulla in case of unirrigated land the mortgage is generally without possession, and the mortgagee receives a share of the produce varying from one-third to one-half in proportion to the amount of loan as interest. As already mentioned the transactions are carried on between the people themselves and very few are therefore registered.

In the course of the survey of Kila Saifulla tahsil it was ascertained that in 1902, 1,994 acres or 9.2 per cent. of the irrigable land were mortgaged for a sum of Rs. 28,207, while in Hindabágh the mortgages covered 975 acres or 5.4 per cent. of the irrigable area, the liability amounting to Rs. 57,701. In the latter tahsil the sales amounted to 439 acres valued at Rs. 34,752. As already mentioned very few of such transactions are registered.

The following statement gives the mortgages and sales which were registered in the District during the years 1903-04 and 1904-05:—

	·	Mortgages.		Sales.	
Details	. Tabsíl.	Amount.	District Total.	Amount.	District Total.
		Rs.	Rs.	Rs.	Rs.
Mortgaged or sold by cul- tivators to Hindus	Fort Sandeman	1,891	1,891		***
Mortgaged or sold among cultivators themselves.	Hindubágh Fort Sandeman.			420 6,740	7,160
Mortgaged or sold by Hindus to cultivators			.,.	500	500
Mortgaged or sold by cul- tivators and Hindus to Government	Fort Sandeman		han	500	500
Mortgaged or sold among Hindus themselves	Fort Sandeman	3,462	8,462	4,795	4,795

Horses, camels, bullocks, donkeys, sheep, and goats are the principal domestic animals. Buffuloes are possessed only by the Hindustáni Gowálas at Fort Sandeman. Fowls were few in pre-British days, but they are now reared and fetch 3 to 5 animals. annas a piece according to size. Eggs cost from 1 to 3 annas a dozen. Nearly every household possesses a shaggy sheep dog for purposes of protection.

AGRI-CULTURE.

Domestia

The following table shows the estimated number of camels, donkeys, cattle, and sheep and goats in each tabsil in 1904 :--

Tahsil. Camels.		Donkeys.	Cows and Bullocks.	Sheep and Goats.	Buf- faloes.	
District Total.	3,656	1.873	9,036	212,874	42	
Fort Sandeman	539	1,072	8,097	112,499	42	
Kila Saifulla	2,837	4 2 3	631	60,615		
Hindubágh	280	378	308	39,760		

Nomads, principally Ghilzais, belonging to the Núsart Sulaimán Khél, Shínwári, Kharoti and Taraki sections visi the District during the winter, and the number of animals in their possession was estimated in 1904 to be as uder:-

Tahsil.	Camels,	Donkeys.	Cows and Bullooks.	Sheep and Goats.
District Total.	12,155	8,553	1,568	69,428
Fort Sandeman	3,334	1,402	1,528	41,980
Kila Saifulla	1,881	97	25	2,448
Hindubágh	6,910	7,054	15	25,000

Information about the different breeds of horses in Horses. Baluchistán, their rearing and training and the system of breeding adopted by the Army Remount Department will be found in a monograph published in 1905 under the authority of the Revenue Commissioner in Baluchistán.*

^{*} Horses, Horse Breeding and Horse Management in Baluchistan, by R. Hughes-Buller, I. C. S., with an Appendix by Major H. M. Patterson. Army Remount Department.

Owing to the general mountainous nature of the country, Zhob is not a horse breeding district, but the number of animals are gradually increasing, and in the Kila Saifulla tahsil there are a fair number of ponies of a better stamp. In pre-British days the indigenous breeds known as spirkai and pasta were preferred, but are not now bred. No Government stallions are kept in the District.

Camela.

The camel is the common transport animal of the District. and, as there are no railways, is largely used for all transport purposes. The majority of the animals kept by the permanent inhabitants are females used for breeding purposes. The breeders are chiefly the Ali Khél, Daulatzai, Bátozai. Ghorézai, Mírzai, and Jalálzai sections of Sanzar Khél Kákars in Kila Saifulla; the Mírzai Kákars and Lawánas in Hindubágh; and the Mando Khéls in Fort Sandeman; the number of indigenous camels in the two latter tahsils is however, comparatively insignificant. Three breeds are locally known from their colour-sra (brownish red); zhara (light brown); and kharah (dark brown). The transport trade on the Harnai-Fort Sandeman and Fort Sandeman-Déra Ismáil Khán roads is in the hands-of aliens, chiefly Ghilzai Powindahs, Jats of Déra Ismáil Khán and Lángavs of Kalát, the last named working only between Harnai and Fort Sandeman. The greater part of the non-indigenous camels in the District belong to Ghilzai Powindahs, principally Násars, Sulaimán Khéls, Mián Khéls or Mia Khéls Malla Khéls, Kharotis, Tarakis, Shinwaris, and Dotanis The Násars are the largest camel owners of all. These Ghilzai camels, as a rule, frequent the District only from November to March every year. A certain number are met with during the rest of the year also, though few are to be found in the hot months of June, July, and August,

Cattle.

Cattle are represented by a hardy breed indigenous to the country and generally black or red in colour. These are

^{*} The question of obtaining one for the Kila Saifulla tahail is under consideration.

small in size and the cows are poor milkers. Cattle for Agriploughing purposes are often imported from Tarnak and Arghasán in Afghánistán and also from Duki and Músa Khél in the Loralai District. Ordinarily cattle only are used for ploughing.

Donkeys.

The donkey is chiefly used for transport. Four indigenous breeds are recognised-skinghári and spérkai found in Fort Sandeman and jatai and maidani in Hindubagh. first named is the best, and an animal fetches from Rs. 30 to Rs. 40; it is generally white in colour. The others are generally black or brown in colour and of smaller size, the intai and maidáni fetching from Rs. 8 to Rs. 15, and the spérkai, an inferior breed, from Rs. 6 to Rs. 12. The principal breeders are the Sanatias in Hindubágh, the Jalálzais and Mírzais in Kila Saifulla, and the Haripáls and Kibzais in Fort Sandeman.

> Sheep and goats.

The indigenous breed of sheep are of the thick tailed, hornless variety, generally white in colour and of low build. The principal breed is the spinkai, known to the Mando Khéls as torqhwazhi. Outside the District the breed is known as zhobi. The sub-varieties are distinguished from the colours of the muzzle, ears and feet, the body being generally white. They include torghári (black neck); torghwazhi (black ears); torkhuli (black muzzle); sraghwazhi (brownish red ears); spola (spotted body and feet); tor langue (black feet); and skhara known to the Mando Khéls as charga with a brownish red body and white forehead. Two other breeds which are peculiar to the Mando Khéls and Shíránis of Fort Sandeman respectively are the bori and sarboli. The bori is a large sheep, brownish in colour, and a very good milker. The sarbols is white in colour with small ears and long hanging fat tail.

The goats are generally black with longish horns. There are no special varieties and the different kinds are distinguished by their colour, tora (black), spina (white), khara (dark brown), and sra (brownish red). The principal flockowners

are the Adinzais and Mirzais in Hindubagh; the Ghorézais. Bátozais, Ismáilzais, and Jalálzais in Kila Saifulla; and the Sulaimánzai Mando Khéls, Huramzai Abdullazais, Kibzais and Mardánzais in Fort Sandeman.

Wool.

Sheep are shorn twice during the year, in the spring and autumn. The Mando Khéls and Mardánzais of Fort Sandeman, who stay for a longer period with their flocks in the Khurásán hills, shear their flocks only once a year during the spring. Goats and camels are shorn only once during the year in the spring. A goat produces from 6 to 12 ounces of wool each year, a sheep 2 to 3 pounds, and a camel from 1 to 5 pounds. Goat hair (wuzghuni) is used by nomads for making ropes, sacks, and the kizhdi flaps (tágae); camel wool is employed for making sacks, and sheep wool (warai) for making felts (krásta), felt cloaks (kosae), and rugs (kambala). The selling price of goat hair is about Rs. 10 a maund, and that of camel's wool is about Rs. 6 to Rs. 8 per maund. The price of sheep's wool depends on the Karáchi market, to which it is exported, and exhibits considerable variations, being sometimes as low as Rs. 10 and sometimes as high as Rs. 22 per maund. The wool is very dirty, the reason being that the sheep, the wool of which is intended for export, are not washed before being shorn, while those of which the wool is required for home use are washed before shearing. The wool is usually purchased through local middlemen.

kind of animal.

Male camels vary in price from Rs. 50 to Rs. 80, and value of each females from Rs. 50 to Rs. 60; ordinary small ponies can be purchased from Rs. 50 to Rs. 100; horses fetch from Rs. 100 upwards, according to quality. The price of a pair of bullocks varies from Rs. 60 to Rs. 80 and a cow can be bought for about Rs. 30. Sheep fetch from Rs. 4 to Rs. 6; lambs about Rs. 2; goats Rs. 8 to Rs. 5; kids about Rs. 1-8; and donkeys from Rs. 6 to Rs. 40.

In the greater part of the District the area of pasturage is practically unlimited, and in normal years the hill sides

and valleys are covered with grass and with numerous small cruciferous and leguminous plants which afford excellent grazing for sheep and goats. Good camel grazing is obtainable in most places. In the irrigated tracts bhusa, the straw of mung, green wheat and barley (khid or khasil) and green stalks of maize and juári (karab) are also used as fodder for horses and cattle. A striking feature of the District is the annual migration of the greater portion of the population between north and south in search of pasture The Kákar Khurásán hills north of the Zhob valley form the great grazing ground of the District. The tide of migration commences in the beginning of May, when the spring in the valley has drawn to a close, and recedes after the summer rains in August to find fresh pasture in the valley. On theirreturn from Khurásán some of the Sanzar Khéls visit Chinjan and Ghurmi in the Bori tahsil to pasture their flocks returning to their permanent homes in November. Sanatias of Kanr Mehtarzai enter the Pishin valley during the winter and graze their flocks in Rod Surkhab and along the skirts of the Takatu hill from December to March, There are no regularly fixed pasture grounds, but some of the best tracts, which are covered with grasses during the spring and after the summer rains, are Marzaghán in Hindubágh; Sháh Sághra, Shanglúna, Kharakhám, Gazli and Khaisor in Kila Saifulla; and Chukhan, Sri Toi, Spéra Khwára, Sághra including Ghásh, and Dabin Fort Sandeman. In Kák, ar Khurásán pasture is abundant everywhere, but flocks remain in the neighbourhood of localities where water is available. the principal of these being Taghratu (within the boundary. of the Quetta-Pishin District), Torhauduna, Ghabargae Kajir, Loeband, Garsmalán and Bahlol, Kundar, Wáli Murgha, Pálézgír, Dom, Ghazlúna, Tirkhawar, Topán, Khaddar Tsáh, Kamar-ud-dín Káréz, Nukur, Sra Tsáhán, Wucha Ghabarga, Barkai Palanah, Kara Murgha, Kandil, Pinakai. Késhatu, Turwah, Loidagar, Wasta, Súrzangal, and Zari Dagar. The principal grasses are known as saba, kumála, pa.

barwazi, sargara, wizha, washta, sarghasi barrav, and shakras, the first-named being esteemed the best. The bushes used as fodder are the tirkha, zamai, khamaziras, raghbolas, khokhaj, stagh, and mákhai. Of the grasses, the pa, barwazi, and barrav, and among the bushes, the khamaziras, are peculiar to the valley. In Kákar Khurásán the principal fodder is the tirkha among bushes and washta, kumála, shakras, sába, and sargara among grasses. Tamarisk (gaz) found in the Zhob river, and in the Kandíl and Rod Fakírzai streams, forms good fodder for camels.

There is no system of reservation except in the Fort Sandeman tahsil where, after the summer rains in July and August, it is a common practice to protect uncultivated tracts in the vicinity of villages. These tracts when reserved are known as pargor. The closing season extends up to end of October, and early in November the villagers with common consent open the pargor to grazing. Outsiders are prohibited from using these tracts and trespassers are not allowed to graze with impunity. Cases of disputes are not uncommon.

Cattle diseases.

No scientific enquiries into prevailing cattle diseases have ever been made. Mention may, however, be made of a few of the more common diseases known to the cultivators. their characteristics, and the local remedies. In most cases the branding iron is resorted to and the mullá's charm is regarded as the best specific. Segregation is resorted to in infectious diseases. The most dangerous diseases are considered to be warkharae and dukh in sheep; wuzmar and pun in goats; drolbae and kurub in cattle, and surpa in camels. Warkharae (dyspepsia) prevails among flocks in the spring by over-feeding on fresh pasturage. A free discharge from the bowels is followed by constipation. The usual remedy is to starve the animal for twenty-four hours and then administer gambéla (Mallotus philippinensis) in the form of pills. In dukh, which also attacks goats, blood is discharged with the urine. The disease is fatal

and no remedy is known except the mulle's charm. The symptoms of wuzmúr are discharges of fluid from the nose, loss of appetite, and eruptions on the lungs. The animal moans painfully. This disease causes great mortality and is very infectious. "A hundred goats," says the local proverb, "are one meal for the wuzmar." A kind of inoculation is practised as a remedy for the disease, by taking a portion of the lung of a diseased goat, mixing it with equal quantities of powdered cloves, pepper, turmeric, aniseed. ginger, and khusuwza, and inserting the mixture in a slit made in the right ear of each of the remainder of the flock. It is possibly pleuro-pneumonia. In pún also called vaman or itch, which is common to goats and camels. the animal gets eruptions on the body followed by loss of hair. The usual remedy is to rub the body with zarana. an extract of the sap of the edible pine or pinus excelsa (nashtar) mixed with ghi, the preparation being also administered internally. Of cattle diseases, drolbae, the symptoms of which are similar to those of wuzmár generally proves fatal within fifteen days. Animals that survive this period are made to inhale the smoke of gangu (Orthonnopsis intermedia). In kuráb (foot rot) eruptions appear on the feet followed by loss of the hoof. The animal is muzzled and made to stand in mud. Fomentation with heated bricks and the pouring of cold water on the affected parts is another remedy. Surpa is peculiar to camels, the symptoms being a cough and discharge of fluid from eves and nose. It is possibly acute bronchitis. No remedy is known except the mulla's charm, the disease proving generally fatal.

Other diseases among the sheep are shinghulánzi (mammitis), which is an ulcer in the udder making it hard, the remedy being to plaster the udder with earth taken from ant hills; lawa or flow of fluid from the mouth; garg (malignant sore throat); maknrai or the presence of worms in the intestines, the remedy in the two latter diseases being the

gambéla pills already referred to ; zazhae which is characterised by eruptions on the tail, mouth, and elbow, the only remedy being segregation; tak or súr ranz which is stage gers. Goats and cattle also suffer from tak. disease from which cattle and all ruminant animals suffer is parsolal las which is a form of colic, the belly swelling suddenly. No efficacious remedy is known. The animal is made to walk. bitter oil is administered and sometimes. especially in the case of cattle, the belly is pierced through with a sharp knife. Camels suffer from sorpára or a boil in the mouth; raghbandi or the swelling of the front part of the body; and marghak (tetanusin fatal cases) in which the neck is distorted and the animal writhes; no remedy is known. Among the diseases from which horses and donkeys commonly suffer may be mentioned korbala and band (colie), saghao (catarrh), and magháo (laryngitis),

Government irrigation works.

In 1901 Mr. C. B. Mellor of the Punjab Irrigation Department, visited the Zhob valley in order to report on irrigation projects from Hindubágh to Fort Sandeman on the bases of schemes suggested by Mr. Hoernle, Executive Engineer, in 1891. The detailed report * prepared by Mr. Mellor was printed under the authority of the Local Government. Mr. Mellor, after inspection of the whole valley, came to the conclusion that kárézes must be depended on at present for any increase of cultivation; that it was not worth while trying to improve the discharge of springs: that the flood supply of the Zhob river itself could not be made use of, and the nature of the banks, the width across, the height of the banks and the nature of the bed rendered works to utilize the small permanent supply out of the question, except in the lower reach from Badenzai downwards, where, however, the zamindars already made good use of the water. He reported that the only tributaries to the Zhob river which have a permanent

^{*}Notes on Certain Irrigation Schemes in the Zhob Valley, by C. B.Meiler, Esq., Punjab Irrigation Department, 1901.

flow of water are the Kamchughae, Kazha, and Sawara streams in none of which is the supply sufficient to justify any large expenditure. He was of opinion that the most promising sites for works to utilize flood water are-Kazha, Tiri Tangi, and Toiwar, but sufficiently accurate information on which to base projects was not obtainable from the local inhabitants. Mr. Mellor suggested several sites for kárézes.

Toiwar irrigation scheme.

AGRI-CULTURE.

A scheme to dam the Toiwar was suggested by Major Showers, Political Agent, in 1899, and the Military Works Department prepared two alternative schemes amounting to Rs. 17,000 and Rs. 20,000 respectively. A sum of Rs. 9,000 was allotted and the work was begun as a famine relief measure, but after a preliminary expenditure of Rs. 2,000 it was abandoned, as the people for whose benefit it was started did not seem eager to work. In 1901 Mr. Mellor visited the locality, and was of opinion that the scheme could not be completed under thirty to thirty-five thousand rupees. From enquiry on the spot, he came to the conclusion that the water supply for the reservoirs was ample, but that the quality of the water was doubtful. He found that the subsoil in the neighbourhood of the proposed reservoirs was impregnated with salt, and that there were traces of salt on the surface all over the country. flood water also came down laden with silt and it was some time before the water cleared sufficiently to make it worth taking. Mr. Mellor finally came to the conclusion that "as the flood water of the Toi river appears to carry a great quantity of silt and as the presence of salt is suspected, in my opinion it would be bad policy to spend money on either reservoirs or tanks without further reliable knowledge." Since this report no further action seems to have been taken (1905).

The sources of supply are shown in detail in table IV, Sources of irrigation. Volume B, and include 26 streams, 437 springs, and 123. kárézes (1905). Of the total amount of land under

cultivation in 1904-05 the area under permanent irrigation was represented by 95 per cent. in Hindubágh, excluding the Khurásán circle; 99 per cent. in Kila Saifulla, excluding the khushkába area which had not been brought under survey, and 87 per cent. in Fort Sandeman.

Streams.

Out of 26 streams, 5 are in Hindubágh, 10 in Kila Saifulla, and 11 in Fort Sandeman. The total area under permanent irrigation from streams in 1904-05 was 9,259 acres in Hindubágh, and 671 acres in Kila Saifulla. principal among these streams include the Zhob river. Siliáza, Viála, Sawara, Khaisára and Mazghár in the Fort Sandeman tahsil; Rod-i-Jogizai which is known lower down as the Toiwar in Kila Saifulla; and Kamchughae, Rod-Fakírzai and Zhara-ghézh in Hindubágh. The water of the streams is raised by means of dams thrown across the bed and the water is led in open channels to the land. Some of the channels exhibit considerable ingenuity of construction, and such is the case more especially in the Kamchughae glen were water has been raised from the bed of the stream to great heights to the terraced fields. The dams known locally as wand are constructed jointly by the cultivators, labour being supplied in proportion to shares in the water. They are only of a temporary nature, and are a species of breakwater made by driving piles into the river bed and filling up spaces with mud, bushes, and branches of trees.

The Zhob

The supply of water appears in the Zhob at about 45 miles from its source, but owing to its high banks it is not used for agriculture till it passes by the Samakhwal hillock, where the first dam is constructed to take off water for the Bádenzai lands. Lower down similar wands are made by the villages of Malawar, Jhalár. Déra, Darga-Mandezai, Atál, Sulaimánzai, Akozai, Brunj, Takarae, Khajjukzai, Narezai, Khátol Kot, Sáfi Kot, Mír Ali Khél, Talkhánkot and Mughal Kot, all in the Fort Sandeman tahsíl.

Dry crop cultivation both by rain and flood water is known by a common term, wuchobgi, as distinguished from permanent irrigation (zindae). Purely flood irrigation known to the revenue officials as sailába is inconsiderable. Rain water in the numerous mountain torrents (lah, lahar or shelu) is taken off by channels to the embanked fields (tand) which are already prepared for the purpose, the embankments being known as kúl, and the distribution channels, as báh. The lands higher up the stream have the prior right to irrigation, the custom being known as sarwarkh. Reference has been made above to the difficulties of utilizing the flood water of the Zhob river for purposes of irrigation. There are no very large dams in Zhob such as those found in the lowland parts of Beluchistán, but mention may be made of an old dam called Band-i-Dawi at Band-i-Dawi. Kuriawasta in the Khurásán plateau. This is said to have been constructed by the Dawi tribe in the time of Nadir Shah and was meant to irrigate a large tract of land about 7 or 8 miles long, and a quarter mile broad stretching as far as Káréz Kamar-ud-dín. The dam which is about 500 feet long, 4 or 5 feet broad and 12 feet high is, however, in disuse, the water being strongly impregnated with salt which in winter when the water is dry forms a deposit some 2 feet thick on the bottom of the lake formed by the dam.

AGRI-CULTURE

> F'lood irrigation.

Springs.

Of the 437 springs in the District, 279 are in Hindubagh, 106 in Fort Sandeman, and 52 in Kila Saifulla. The area irrigable by springs in 1904-05 was 2,755 acres in the Hindubágh tahsíl and 948 acres in Kila Saifulla. In the case of the larger springs the water is led to the land through channels (viála), but most of the springs are small and the water has to be stored in a reservoir before it is turned on to the land. This is especially the case in the small hill springs known as tsakhobae.

Out of the 123 kárézes at present (1905) found in the District, 71 are in Hindubágh and 52 in Kila Saifulla: the area irrigable by them in 1904-05 amounted to 5,887 and

Kárézas.

19,915 acres, respectively. The káréz is a very ancient method of artificial irrigation indigenous to the country, and there are ruins of old kárézes in the District which are ascribed to the Mughals.

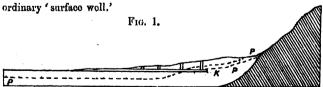
As a source of irrigation the kurez is so important that the following account of it by Mr. R. D. Oldham of the Geological Survey of India, may be quoted in extenso.* "As the theory of the káréz is a matter on which much misconception is prevalent, it will be well to treat of it briefly. The ordinary explanation is that an 'underground spring' having been discovered, a series of shafts connected by tunnels is made, by which the water is brought out to the surface. This idea of an underground spring is extremely prevalent and owes its origin to the description of the natives, who have frequently told me that the water entered their kárézes from springs. I have scrambled through the underground passages of some of these kárázes to investigate the matter and have found, as might be expected, that the description is a natural but misleading one. In a few cases the kûrêz does appear to derive its supply from what may, without great impropriety, be called an underground spring. Such are the kárézes between Kuchlák and Baléli which are driven through impervious Siwalik clays up to the foot of a limestone ridge: it is not from the Siwalik clays that they could derive any supply of water, so it is probable that there are here springs issuing from the solid rock. A still more striking instance is a short káréz at Kiráni driven, not into either of the fans which lie to the north and south of the village, but towards the hill where there is no stream valley of any size; yet this is not only the shortest but one of the most abundant kárézes I have seen; here, too, it seems probable that the water is supplied by a spring issuing from a solid rock. Such cases are, however, very exceptional, and, as a rule. the explanation, both of the real facts and of the origin of

Records of the Geological Survey of India, Vol. XXV, Part 1, 1892.

the misconception regarding the action of the kárézes is very different.

AGRI-

"As the karezes are never lined in any way," it is impossible to drive them through incoherent material charged with water; it would moreover be unnecessary to do so, as, if an incoherent bed of sand or gravel charged with water were once struck, the supply would amply satisfy the desires of the karaz diggers. The karazes, then. after they enter ground charged with water, can only be driven through stuff which is rendered coherent by a greater or less admixture of cementing material, But this cementing material not only renders the ground firm enough to form the sides and roof of the tunnel, but lessens the permeability of the ground, and, what we are more concerned with, makes it irregularly permeable. When the káréz is driven through such a deposit, the water will first of all drain away at those spots, where it is most permeable, very probably washing out the fine-grained matrix and orming a small channel penetrating to greater or less distance from the sides of the tunnel. Into this channel water will percolate, and, instead of oozing from the sides. enter the karez principally at certain defined spots, giving rise to what are called springs. The origin of the commonly held idea is thus natural and easily explained, but to call these 'undorground springs' is a misnomer and as misleading as it would be to apply the same name to an



"Having stated what is not, it is now necessary to describe what is, the correct explanation of a kárés. In Fig. 1, a diagrammatic section of one of the gravel slopes is represented, the dotted line P. P. represents the limit of permanent saturation, that is the limit below which the gravels are always charged with water even in the driest season. Such a limit exists everywhere, but the form of its contour depends on a variety of conditions, such as the rainfall, discharge of streams at the head of the fan, permeability of the gravels, etc., which need not here be considered in detail. Now, if the kárés K. K. is driven into this slope, that portion of it which lies below the line P. P. will drain the sub-soil of its water and discharge this at the outlet.

"It will be seen from this that in its nature and mode of action the kárés is only a sub-soil drain, in both cases the object is to bring water, which lies underground, to the surface, the only difference being that in the one case it is desired to obtain the use, and in the other to get rid, of the water.

"From the nature of the case these kárézes are affected by the rainfall in a marked manner — a single dry season, and, still mose, a succession of years of deficient rainfall causes a diminution in the discharge of the kárés. Last year (1890), the falling off of water supply was very widespread, and, so far as the diminished discharge was only due to the dryness of the season, was not altogether an unmixed evil, for it led to an energetic cleaning out and in some cases lengthening of the kárés which will improve its ultimate capacity. In a new kárés, however, the failure may be due to another cause, which is more serious, as it permanently affects the supply of water, and may make this fall so low as to lead to the abandonment of the kárés.

"When the kárés K. K. in Fig. 1, is first made, water will flow freely into it from the surrounding gravels in all

that portion which lies within the original limit of permanent saturation. But, after it is completed, a new outlet is provided for the sub-soil water, the limit of permanent saturation will adapt itself to the new conditions and ultimately settle down with a profile which may be represented by the line P. P. P. The subsequent history of the káréz will now depend on the relative importance of the causes which led to the sub-soil water originally maintaining its level along P. P. P. If the gravels were tolerably permeable and a considerable supply of water was constantly percolating through them, the káróz will settle down to a fair or abundant discharge. If, on the other hand, the amount of water percolating was very small and the level of permanent saturation kept up by the impermeability of the gravels, the ultimate condition of the káréz will be one of very small discharge.

"I do not know to what extent this cause of failing supply of water has acted, or is acting, but there can be no doubt that, except in the case of old-established kárezós, it must, to a greater or less extent, be at work. I made many attempts to collect information which would bear on this point, but was baffled by ignorance, reluctance to impart the information, or an inability, real or pretended, to understand the points regarding which information was desired. I was unable even to arrive at a trustworthy conclusion as to whether the reputed diminution of supply was as common, or as extensive as was complained of, and this, when we consider how many reasons the proprietors have for complaining of a failure of water supply and the absence of any inducement to acknowledge an increased discharge, is not to be wondered at.

"As might be expected in a country where water is so valuable and apparently so mysteriously capricious in its occurrence, a class of men has arisen which pretends to a special knowledge of the underground distribution of water and to them the planning of new kárézes appears to be

principally entrusted. I have not met any of these men. but so far as I can gather they seem in some cases to possess a certain amount of knowledge partly inherited, partly the result of observation, of the subject they profess. This is doubtless mixed up with a good deal of superstition but as their directions are received with the same implicit belief as their rulers grant to the dictum of any self-styled 'expert,' the shaft, sunk on the spot indicated, is carried down till it reaches water, whereby the reality of his knowledge is proved. Meanwhile he takes care to conceal the knowledge. if he possesses it, that there was no special virtue in the spot selected, and that there are many other places where a shaft would be equally certain to strike water, if given the same chance. Should water not be found, his employer is probably informed—for there is a close resemblance between the various species of the genus expert—that he did not go deep enough or that though water was not found just there 'the indications are very favourable,' he is recommended to try some other place near by, and, if his patience or capital be exhausted before water is obtained, the expert, following the example of his kind, takes himself off to another country where his ignorance has not been exposed, there to find that ready credence which mankind is prone to yield to a plausible assertion of knowledge and, with better luck. repair his damaged reputation.

"The amount of labour spent on some of these káráses and the depth of their numerous shafts, is astounding; they are frequently miles in length, and the shafts near their heads are said to be in some cases 150 feet deep. This is doubtless an extreme case, but, when examining the Quetta plain, I found that in many cases the shafts at the head of those which drain from the hills east of the valley, could not be plumbed with the 70-feet line I carried with me. These must have taken many years and cost large sums to excavate, but it is probable that the whole was not made at once, and that they were gradually lengthened at their upper ends

where they are deepest out of the profits derived from the water which the original shorter channel yielded."

AGRI-CULTURB.

The local experts in karés digging are the trans-border Ghilzai Afghans who come to the district in winter. They prefer this season owing to the severity of the climate in their own country, and the convenience of working underground in winter. Among the indigenous population some of the Morézais and Mehtarzais of Hindubagh and Mirzais of Kila Saifulla have also learnt the art of karez digging. The káréz'diggers generally work in parties of four, each of which is technically known as a charkk. The name is derived from the "windlass" which forms the most important part of their equipment. The work is done either by contract for a lump sum, or on payment by actual measurement, and, while they are employed, the workmen are generally provided with food, tools, loin cloths, and lights by their employer. The tool chiefly used is a short pickaxe (kulang). which can be used by a man in a kneeling or crouching attitude. Details of the prevailing rates for káréz work will be found in the section on Wages.

The excavation of a $k dr \acute{e}z$ is an expensive undertaking, and it is, therefore, generally constructed by joint capital and owned by several co-sharers. If a capitalist gets a $k dr \acute{e}z$ made to irrigate land belonging to another person, the water and land are, as a rule, divided equally between the capitalist ($khat \ kush$) and the landlord.

In selecting a site for a káréz the excavators are guided solely by experience, and have no scientific knowledge. Professional water-finders are known in the Ghilzai country, but do not visit this District. Generally a site is chosen along the banks of a hill torrent, or in one of the inosculating fans situated where a hill torrent debouches from the mountains into the valley. Note is also taken of the appearance of moisture after rain, and of the presence of moisture-loving shrubs and grasses. The next step is to dig a trial well (gumána) and if this proves successful, other wells

are dug and connected by tunnels (lambur) until the water reaches the surface. If the ground is soft, the wells and channels are lined with stones (sangchin). Any proposals to sink a new kárés near to an existing one is regarded with great jealousy. The minimum distance to be left in such cases varies, but it is generally from 100 to 200 vards in Hindubágh and 40 vards in Kila Saifulla. According to expert opinion the distance must be 1,000 yards.

The expense of digging a káréz is usually from Rs. 4,000 to Rs. 10,000. The Government has encouraged the construction of such works by granting takávi advances, and by exempting such new sources of irrigation from payment of revenue for a term of years. The principal kárézes in the District are Kam Káréz (330 acres) and Káréz-Kán Mehtarzai (268 acres) in Hindubágh and the following in Kila Saifulla: - Tárwál (268 acres), Bahádurwál (237 acres) and Bahrwál (229 acres).

No scientific enquiries with the object of ascertaining the utility of machinery for káréz excavation have yet been made. A subject, which will probably require attention at no distant date, is the diminution of the area commanded by kárézes, owing to the lowering of the water level by constant cleaning. This is especially the case in Kila Saifulla.

Maintenance water channels.

The miráb, where such a village official exists, and in of Karees and other places the headman, makes the necessary arrangements for the repair of a káríz. If the work to be done is heavy, a káréz kash is called in and asked to give a rough estimate of the cost. The money is then collected from the co-partners, in proportion to the share held by each in the water, and the work carried out under the supervision of the miráb or headman. On the completion of the work, it is examined, the account is made up and any excess or deficit is adjusted. For work, which requires no special skill, the labour is provided by the copartners. Repairs to kárézes are very expensive and large

takávi advances are made for the purpose. This tells very heavily on the prosperity of the agricultural population. Open channels are generally cleaned by the owners In the Fort Sandeman tahsil where water themselves. channels have to be cut through hard and rocky soil labour is employed, the Ghilzais being engaged for the purpose.

AGRI-CULTURE.

Permanent sources of water are divided into a number of shares, the usual unit of division being the shavaroz, or the water. flow of a day and night. The minor divisions of a shavaroz differ in various parts of the District, but those in commonest use are indicated in the following table :-

Division of

I.-Fort Sandeman Tahail.

- (a) Among the Abdullazais and Kibzais the lowest unit is atama-
 - 2 atama = 1 tsaloram.
 - 2 tsaloram = 1 nimkai.
 - 2 nimkai == 1 wial.
 - = 1 shavároz=24 hours. 2 wial
- (b) Among Shíránis and Haripáls the lowest unit is ním cháryak or ním kurvae—
 - 2 ním chárvak = 1 chárvak.
 - '2 chárvak = 1 nímhor.
 - 2 nímhor = 1 hor.
 - 2 hor = 1 shavároz.
- (c) Amongst the Bábars the lowest unit is nim shapárasam -
 - 2 ním shapárasam = 1 shapárasam.
 - 2 shapárasam = 1 atama.
 - 2 atama = 1 tsaloram.
 - 2 tsaloram = 1 nimkai.
 - 2 nimkai = 1 hor or wisl.
 - = 1 shavároz. 2 hor or wial
- (d) In the Jhalar village the lowest unit is shingari-
 - 2 shingari 2 nimkai = 1 nimksi.
 - = 1 wial.
- 2 wial = 1 shavároz.

II.—Kila Saifulla Tahsíl.

ÁGRI- Culture,
CULIUMA,

```
(a) At Toi Bátozai the lowest unit is pucha-
```

4 pucha = 1 charik.

2 charik = 1 nimkai.

2 nimkai = 1 kandai.

2 kandai = 1 shavároz.

(b) At Barat Khél the lowest unit is wand or charik-

2 wand or charik = 1 psha.

2 psha or nimkai = 1 wial.

2 wial = 1 hor.

2 hor = 1 shavároz.

(c) Elsewhere in the tahsil the lowest unit is nimgargi—

2 nímgargi = 1 nimkai.

2 nimkai = 1 wand.

2 wand = 1 nimkai.

2 nimkai = 1 wial.

2 wial = 1 shavároz=24 hours.

2 shavároz = 1 tal.

III.—Hindubágh Tahsil.

(a) In the Murgha circle the lowest unit is sáya-

2 sáya = 1 nimkai.

2 nimkai = 1 wial.

2 wial = J shavároz.

(b) In the Babu China circle the lowest unit is alama—

2 atama = 1 tsaloram or chaloram. 2 tsaloram = 1 nimkai.

2 nimkai = 1 wial.

2 wial = 1 shavároz.

(c) In the Hindubagh circle the lowest unit is pucha-

 $2\frac{1}{2}$ pucha = 1 atama.

2 atama = 1 tsaloram or chaloram.

2 tsaloram = 1 nimkai.

2 nimkai = 1 wial or hor.

2 wial or hor = 1 shavároz.

The actual distribution is conducted by the mtrāb or other person charged with the work who is guided by an ingenious dial during the day, and during the night by the position of the moon and certain stars. The day is divided in different places into 4, 8, 16, 20, and 32 parts, the commonest system being that under which it is divided into 8 parts. For distribution during the day among the Abdullazais and Kibzsis of Fort Sandeman, a dial is made of a straight stick, 12 fingers high, which is planted in level ground at sunrise. Subsequent operations are explained by the following diagram:—

R

A B represents the stick and C H the ground line, the first atama after sunrise is considered to be over when the shadow of the stick has receded to the point C, which is 24 fingers' breadth distant from the point A. The second atama is over when the shadow has moved 12 fingers further and is at D, while each of the two subsequent atamas, up to mid-day, are represented by a movement for the breadth of 6 fingers each. In the afternoon the reverse process is followed, the last atama lasting from the time the shadow has reached the point H till sunset.

The night is also ordinarily divided into 8 parts, but the distribution is a much more difficult business and is conducted largely by guess work. The miráb is, however, assisted by the position of certain stars in the heavens, on their appearance and disappearance in the east and the west, respectively. Water is required most from March till end of December and it is during this period that the hisábgar or siáhgar, a

man who is an expert in the calculation of time and in his absence the $mir\dot{a}b$, has to keep a careful watch during the night and settles all disputes.

These are the principles in accordance with which the miráb calculates the various shares. Their practical application differs according to the quantity of water in the different sources. Thus, on the Zhob river, which has a large supply of water, the shares belonging to different communities are sometimes taken off in separate channels; and each of the latter is further subdivided by means of a wooden divide. Each complete share taken according to the land available, is known by a different name, such as wial, atyágún, wandgari, tal, and kandae. Each of these is further subdivided among co-sharers, the minor subdivisions being known as psha, nimkai, shíngaraí, shingarah, gutta, tsaloram, athánac, páo and ana, etc.

In the Hindubagh and Kila Saifulla tahails the water is either permanently divided, or is distributed periodically. In the latter case, early in March all those who have a share in water assemble together to arrange their turns of water which is done by casting lots (pucha andází) with sheep or goat dung which are mixed, each with a mark, and then drawn out. The turns thus determined remain in force in some places for a year and in others for a harvest.

Another system which may be mentioned here is that known as land. During the autumn harvest the division of a source of irrigation is reduced by one-half. For instance a káréz or spring which has 12 shavároz of water is treated as having 6 shavároz only. In this way every co-sharer gets a turn of irrigation every sixth day instead of every twelfth day. The advantage of this becomes manifest when it is borne in mind that the kharíf is a crop which requires more constant watering than rabi and that the area under oultivation is comparatively limited. In sources of irrigation which have a small supply the water has first to be stored in a reservoir before it can be applied to lands. These reservoirs

remain closed during the night, and are opened in the morning. A rough method of dividing water thus stored is by means of a shal or tagir which is a board having holes in it according to the number of shares in which the water is to be divided.

A third method of dividing the water is by means of a graduated stick called *largi ták*. When it is intended to portion out the water of a tank or cistern, the stick is placed in the middle of it and share-holders take water according to its gradations.

Wherever sufficient water power exists it is employed for water mills. turning water mills. The latter numbered 60 on the 31st of March, 1905. Of these, 29 were in Hindubugh, 11 in Kila Saifulla, and 20 in Fort Sandeman. The mill stones are locally obtained. In Hindubugh they are obtained from the Pitao, Sakir, and Kamchughai hills; in Kila Saifulla from Paski and Tang Haidarzai hills; and in Fort Sandeman from the hills called Harék, Dabar, and Zarmat. The cost of a pair varies from Rs. 25 to Rs. 30.

Water mills are generally constructed below an artificial embankment (wond) along which the channel for water (bila or hamoi) is led. The flow of water is adjusted by a regulator (párcháo) at the upper end of the béla, and it reaches the mill through a water shoot (tarnáwa). The whole apparatus of the mill is enclosed in a mud hovel (khána). Mills are generally constructed by the owners of the land and water and the initial expenditure varies from about Rs. 200 to Rs. 300. A carpenter (tarkhán or ustákár) is generally retained to carry out repairs and to dress the stones from time to time and receives one-fourth in Kila Saifulla and one-sixth in Fort Sandeman of the remainder of earnings after the share of the miller (aséwán) has been set apart. The miller's share is one-sixth in Kila Saifulla and one-sighth in Fort Sandeman. The carpenter and the miller in

^{*} A full description of the apparatus will be found on page 153 of the Ouett. Pishin Gasetteer.

Hindubagh each receives one-sixth of the total produce. Government revenue is everywhere paid first and then the produce is divided in the above manner. In Fort Sandeman the people are not well acquainted with the construction of water mills and Ghilzai labourers are employed when necessary.

The out-turn of a mill varies with the water power. estimated at about 51 maunds in Hindubagh: 6 to 12 maunds in Kila Saifulla and 12 maunds in Fort Sandeman in twentyfour hours. The charge for grinding (muz) is generally levied in the shape of a share of the corn to be ground, the ordinary rate being one-twentieth in wheat; one-fifteenth to one-twentieth in barley; one-fifteenth in maize and judri. and one-tenth to one-fifteenth in millets.

Where water mills do not exist corn grinding is left Hand mills. entirely to the women and is done with the quern or hand mill (méchan) consisting of two grooved stones about a foot and half in diameter.

RENTS. Wages, and

Reference will be found to the character of the tenures PRICES and tenancies in the District in a subsequent section. As might be expected in a backward country, in which crops are liable to great variations, rent almost always consists in a share of the grain heap. A few instances of cash rents are, however, to be met with in the Fort Sandeman tahsil. When a landlord migrates to Afghánistán for a number of years he leases his lands to one of the tribesmen. pays the Government demand and village servants, and also pays to the leaser a cash rent which varies from Rs. 3 to Rs. 4 per shavároz for each harvest.

Produce rents : method of distribution heap.

When produce rents are paid, distribution is generally made on the principle of a share of the produce for each of of the grain the chief requisites of cultivation. Variations occur in different parts of the District in the distribution of the produce of land between the landlord and the tenant, and a brief reference is made below to the rates generally prevalent in each tahsil.

^{*} Chapter 111., Land Revenue.

In irrigated areas when the tenant supplies labour only, the revenue is paid by the landlord, who receives five-sixths of the produce after village servants have been paid, and the tenant one-sixth. When the tenant supplies labour and Hindubagh bullocks, he receives one-third of the gross produce, the land revenue and village servants being paid by the landlord out of his two-thirds. In some instances, especially in Kazha, the tenants are required to pay a proportionate share of revenue also.

RENTS WAGE, AND PRICES.

In dry crop areas the share of the tenant varies from onesixth, when he supplies labour only and does not pay a share of revenue, to two-thirds when he supplies labour, bullocks, two-thirds of seed and pays a proportionate share of revenue. The Mchtarzai tenants who cultivate the Sam Khel lands with their own water pay one-fourth of the produce, after deducting revenue and village servants' wages, to the landlords as their reuts.

In irrigated areas the general custom is for the tenant to Kila Saifulla. supply labour and bullocks; land revenue and village services are the first charge against the grain heap, the balance being divided between the landlord and the tenant, their respective shares being two-thirds and one-third.

In dry crop areas the tenant's share varies from one-fifth, when he supplies labour only, to three-fourths when he makes embankments in waste land and finds all the necessaries of cultivation.

Fort Sandaman Tabsil.

	ABDULLAZA IS		Kibzais,		Shibanig Haripals.	
	Land- lord's share.	Ten- ant's share.	Land- lord's share.	Tenant's share.	Lan ^d - lord's share.	Tenant's
IRRIGATED LANDS.						
When the tenant supplies labour only.	8,4	1/4	•••		• •••	***

RENTS, Wages, and Prices.

	ABDULLAZAS.		Kidsais.		Shiranis Haripals.	
	Land- lord's share.	Ten- ant's share.	Land- lord's share.	Tenant's share.	Land- lord's share.	Tenant's share.
IRRIGATE D LANDS.					-	
When the tenant sup- plies labour and bul- locks.	2/3	1/8	2 3 t o 3 5	1,3 to 2:5	8/4 to 3/3	1/4 to1/3
When the tenant sup plies labour, bul locks and seed.	1/2	1/2	1/2	1/2	1/2	1/2
DRY CROP AREAS						
When the tenant sup plies labour only.	3/4	1/4	2/3	1/3	3/4	1/4 ·
When the tenant sup- plics labour, seed and bullocks.	1/8	2/3	1/4	3/4	1/2	1/2

Among the Shiránis when irrigated land is ploughed by the landlord, and the tenant only waters the land and harvests the crop, the latter receives one-eighth of the produce. The seed for sháli (rice) is supplied by the tenant who also provides labour and bullocks and receives three-fourths of the produce:

Among the Mando Khéls, the tenant generally provides labour, seed, and bullocks, and if the land be good his share is one-third and if inferior half of the produce, after the revenue has been paid. A system peculiar to the Mando Khéls is known as ajal. Under this system the tenant is engaged for a term of years varying from five to twenty. He reclaims waste land, makes embankments, and constructs dams to lead off water from hill torrents for irrigation. He pays to the landlord one-tenth to one-eighth of the produce after deducting Government revenue, as rent, and cannot be ejected during his term of tenancy. The wages of blacksmith and miráb are paid by the tenant.

The general custom among all the tribes in the tabell is that revenue is paid by the landlord and the tenant proportionately, while the blacksmith's wages are payable by the landlord.

The household work of men of means is generally per- Wagen. formed by boys who, if under twelve years of age, are ordinarily given food only, but above that age they receive Re. 1 or Rs. 2 per mensem besides food. These boys belong to poorer families among the tribesmen, and in the Hindubagh tahsil they chiefly come from among the Méhtarzai and Isa Khél Kákars.

The agricultural work is generally done by the tenant himself. At harvest times the poorer among the tribesmen are employed. Such a labourer in Hindubagh gets from the tenant's share 1 to 2 kásas* of grain daily; in Kila Saifulla a reaper gets 11 to 2 kásas daily, while a woman engaged in cleaning the grain is paid from 1 to 11 kásas. Women and children also work at harvesting, their wages being half or a quarter of those paid to an adult male. Such labourers are chiefly met with among the Jalalzai and Batozai. These men when free from their own agricultural work. also go to Bori, Duki, Fort Sandeman, Harnai, and even to Quetta to work as labourers. In Fort Sandeman. labourers for agricultural work are found in each tribe. A labourer working in a rice crop gets daily as much cut rice as he can carry on his back, the out-turn of which is about 11 kásas. For maize and wheat crops the daily wage is a kása of grain.

The Mando Khél, Mardánzai, Kibzai, and Abdullazai Wages of herdamen and flockowners divide the year into two seasons, and shepherds abepherds are paid accordingly. For the first season, September to April, he is given as wages (lawashghas) one-sixth of the male, and one-twelfth of the female kids and lambs, and one-fourth of the wool shorn; for the remaining four months, May to August, he gets four or five kids or lambs

Rents, Wage, and Prices. on the whole flock, together with a quarter of the wool shorn during autumn. He-goats and rams up to 20 percent, are not counted in the flock and no wages are paid for them. Any in excess of this proportion are paid for at the same rates as the rest of the flock. When the shepherd takes the flock away from the village for grazing, he gets for his daily food one hurwae (seer) of grain, half wheat and half maize. Among the Shiranis and Haripals wagos are paid in cash at the rate of Re. 1 for every five sheep during April to September, and Re. 1 for ten sheep during October to March. The reason for the payment of higher rates in the former season is that the people leave their homes at that time to collect asafætida in Chágai and Afghánistán. The Mando Khéls shear their flocks once, and other tribes twice in a year.

The alien population in the Fort Sandeman bazar pay As. 3 per goat and As. 12 per head of cattle per mensem to the grazier.

In Hindubagh the flockowners divide the year into three seasons: first, October to March, when the shepherd gets the same wages (lawazhghae) as among the tribes in Fort Sandeman, i. c., a share of lambs, kids, and wool; second, April to July, when he is paid in cash (paro) Re. 1 for every twenty sheep; and third, August and September, when he gets a fourth of the wool shorn in September as his wages (warai). When grazing away from home, the shepherd is given 10 kásas of grain, half wheat and half juári, as his food for a month, half a seer of china or barley flour per day for his watch dog, and two or three pieces of lándi in winter. When the flock belongs to several persons they pay the shepherd Re. 1 per mensem for every twenty sheep, and food by turns.

In Kila Saifulla a shepherd is paid as follows: for April-May and for August-September he gets as waras one-fourth of the spring and autumn wools. For October to March, he is given as lawazhghao one-sixth of the male

7

kids or lambs and one-twentieth of the females; for June RENTS, WAGES, AND and July, he gets one female kid or lamb for every seventy goats or sheep, but among the Mirzais wages (pare) for the period are paid in cash at the rate of Re. 1 for every twenty sheep. The shepherd when away from home gets his food (10 kúsas of wheat or juári per mensem) and a share of dried meat (lándi).

People other than flockowners keeping sheep and goats during the milking season from April to July for the sake of the milk only pay the herdsman cash wages at Re. 1 for every ten sheep or goats. When dry, the animals are sold.

Cowherds.

The general rate for cowherds in the District is a kurwae of wheat per mensem for every head of cattle he grazes, but in the Fort Sandeman tahsil he is provided with his meals by the cattle-owners, and gets no other remuneration.

A camelherd in Fort Sandeman gets As. 8 and 1 seer Camelherds. of corn per mensem for every camel he grazes.

In Hindubágh if the herd contains forty or fifty camels, the camelherd gets, besides food, As. 2 per mensem per camel, but if the number be less, As. 4 per camel per mensem. In some parts of the tahsil Re. 1 per three camels is given for six months, also food and one-fourth of the camel hair.

In Kila Saifulla a herd consists generally of 120 camels. The Mirzais and Shádozais pay to the camelherd, besides food Re. 1 for every three camels during the six months of winter. During the six months of summer the camelherd is paid at the rate of 4½ kdsas of wheat per camel, but no food is given during this period. The Bátozais, Ghorézais. Haidarzais, and Ismáilzais pay at the rate of Re. 1 for each camel every half-year, but give no food to the camelherd.

The Zamindars are required by shariat (Muhammadan Mullar and law) to set apart one-tenth of their land produce and one- Saiads' wages, fortieth of their flocks for alms (zakát). In Fort

RENTS, WAGES, AND PRICES. Sandeman one-third to one-half of the zakát i given to the village mullá, and the balance is distributed among the poor. For celebrating a marriage the mullá is given a turban and Re. 1 in cash. At funerals also he gets alms. The cultivators also give him bread by turn.

In Kila Saifulla the mulli who conducts prayers is given an allowance by the villagers from the share of their incomes set apart as zakūt.

In Hindubágh, mullús who conduct prayers and officiate at ceremonies, receive from one-third to one-half of the zakát.

Flockowners generally pay the mullá who acts as imím or conducts prayers, at the following rates:—

- (a) Per flock of 40 to 100 sheep and goats. One.
- (b) Per flock of 100 to 140 , Two.
- (c) Por flock of above 140 ,, ,, {One for every 40,
- (d) Camels-

Carpenters' and blacksmiths. In the Fort Sandeman tahsíl blacksmiths (push) also do carpenter's work. In the Shíráni circle each family (orbal) gives the blacksmith 6 seers of wheat and the same quantity of maize at the spring and autumn harvests, respectively. In the Kibzai circle a blacksmith gets 4 kásas of grain at rabi and 6 kásas at kharíf harvest per plough. In other circles the blacksmith is given by each zamindár 1 kása of wheat at rabi and the same

blacksmith repairs all agricultural implements.

quantity of maize at kharif harvest per plough. The

RENTS, WAGES, AND

PRICES

In Hindubágh every large káréz has a blacksmith who is given a wial of land and water for cultivation, the landlords sometimes supplying him with seed for sowing and paying the Government demand on his share of land. In winter each householder gives the blacksmith a pushtai (rib) of dried meat, the entire wool of one sheep, and during the milking season butter from one day's milk of the whole flock, also 16 kaudas (small bundles) of wheat at the spring harvest. The landholders owning small springs give the blacksmith a kása of wheat and a kása of juári per shavároz besides the dried meat, wool, and butter above mentioned.

In Kila Saifulla the village blacksmith in irrigated areas gets one wial of land and water, the seed for sowing being supplied by the villagers. In dry crop areas each family gives him 2 kásus (8 seers) of wheat and 2 pushtois of the lándi meat. The blacksmith does not charge anything for making any new implements except the ghodal for which he is paid As. 8.

The cash rates in villages where fixed wages are not paid, are the following:—

are the following.		
-	Rates for making new.	Rates for repairing.
Name of Imploment. *	Annas.	Annas.
Kráh	12	4
Spára.	3	4
Taráshagh.	3	4
Axe (tubur).	8	2
Knife.	4	1
Lor (sickle).	4	1
Ara.	4	1
Ghodul.	$\left\{\begin{array}{c} \text{Rs. 5-0} \\ \text{or} \\ \text{,, 6-0} \end{array}\right\}$	$\begin{cases} 12 & \text{or} \\ \text{Ro. 1-0-0} \end{cases}$

For new implements iron has to be supplied by the zamindárs who also provide charcoal.

^{*} These terms are embodied in Appendix III.

RENTS, WAGES, AND PRICES.

The ambarchi is employed only in certain villages of the Hindubágh tahsíl. After harvesting, the people of some villages bury their grain in pits (kadhal) and the ambarchi keeps guard over them and is given 1 kása of grain for every 60 kásas under his charge.

Wages of ambárchi.

Mtráb's and challrai's wages.

In the dry crop lands in Kila Saifulla there is a miráb in each village who superintends the cleaning of the channels (báh) and the division of the flood water. When khushkaba lands are distributed for cultivation the mirab gets one share extra. Mirábi is a hereditary office in this tahsíl. In irrigated lands in Hindubágh and Kila Saifulla the miráb, known as chalérai, superintends the maintenance of water channels and does ordinary repairs. When larger work is required, he collects the village people and gets the work done. In return for his labours he generally gets one wial of land and water from the owners of each kares. Three or four persons often join together to work as chalérai in a káréz. The Kam Kéréz, for instance, had four chalérais, who got a shavároz of land and water, the káréz being a very large one entailing heavy work. Sometimes the wages take the form of 50 to 60 kasas of grain, half being given at the rabi, and half at the kharif harvest. In several villages in the Fort Sandeman tahsil, the office of miráb is hereditary, in others he is appointed temporarily. Among the Kibzais and Bábars the post is hereditary. Each miráb gets an extra share of land and water. The Bábars and Kibzais give no grain to the miráb, but among other tribes, besides his extra share of land and water, he gets a kása of grain per wandgari (division of water) at each harvest. Among the Mando Khél, the village headmen act as mirab and get the usual headman's allowances (hag-imalkána) as well as those of míráb.

Wages of crop-watchers. Orop-watchers are generally engaged in each tabsil and are locally known under the name of asyharo or azyharo. In irrigated lands in Kila Saifulla and Hindubágh the azyharo gets 10 kásas of wheat or barley at rabi and

6 to 8 kásas of azhdan at kharif per shavároz. Besides watch-RENTS, WAGES, AND ing crops, the azgharo also distributes water. In the absence of the cultivator, he also waters his crops and for this he gets extra wages at the rate of kasa of wheat daily. In the Fort Sandeman tabsil his wages are variable but generally he gets 1 kasa of grain per wandgari of water at each harvest.

Káréz digging is an important occupation in the Hindu-Káréz diggers. bagh and Kila Saifulla tahsils, and is mainly in the hands of transborder Afgháns, chiefly Ghilzais, who visit the district in winter. Some of the indigenous population, however, have lately also taken to the work. The men generally work in parties of four and in addition to such other payments as may be agreed upon, usually receive food from their employer. This ordinarily consists of 10 kásas of wheat, 4 seers of oil and the same quantity of ghi or fat, Rs. 2 or 3 per mensem for meat, and Re. I for tobacco and salt monthly. The owner also supplies the windlass (charkh), all necessary tools, oil for lamps, and loin-cloths (lang). The most common method for payment of this sort of work is by the piece. The rates vary according to the nature of the soil: in which the káréz is excavated and the following rates prevalent in Hindubágh may be regarded as fairly representative :--

For a well in soft soil, for 3 yards For a well in hard soil, for 21 yards 1 For a well in stony soil, for a span (bálisht)...

Rates for tunnelling are generally the same as for well' digging. Height and width do not matter. Open channels are generally made by the zamindars themselves but when alien labour is engaged, the rate is Re. 1 for four linear yards.

Lining of a tunnel or well costs about As. 4 per yard. The rate for lining a channel with stone is 6 yards for Re. 1, the stone for lining being supplied by the owner. Lining with stone is not done in Kila Saifulla.

RENTS, WAGES, AND PRICES.

The khat kashi system, under which a man digs a káréz in another man's land and, if successful, shares with him the land and water is a recent innovation in Kila Saifulla. Sardár Muhammad Akbar Khán, Jogízai, had a káréz dugfoy a local man to whom he assigned a wial of land and water on condition that he should keep the káréz in repair for three years after which all sharers in the water should be responsible for its maintenance.

For repairs to, and clearing of kárázes, Ghilzais are engaged and paid by contract (ijára); while at work they are supplied with their food and with tools and when the work is finished the cost payable is determined by arbitrators and is based on the supply of water produced. The water channels in Fort Sandeman are excavated or repaired either by the zamindárs themselves, each supplying labour according to his share in the water; or by tenants under the ajal system previously mentioned in this section, or by Ghilzai labour. In the last case the wages vary according to the nature of the soil from Re. 1 per yard in rocky soil to Re. 1 for 30 yards in soft soil.

Labourers.

Domestic servants and almost all skilled labourers are imported from India; chiefly from Sind and the Punjab, and owing to the severity of the winter and the expense of living receive higher wages than are usually paid in India.

Prices.

Wheat is the staple food-grain in the District, but maize and millets are also used. Bhúsa and firewood had no demand in the District before the British occupation and were not, therefore, sold. But since the Military Garrison has been stationed at Fort Sandeman the demand for these articles has increased, and the consumption is more than the tahsil produces. Before the British occupation in years of good rainfall, wheat in Fort Sandeman was sold at from 30 to 35 seers, barley at 40 seers, and country salt from 20 to 25 seers per rupee.

In Kila Saifulla wheat was selling at 36 to 40 seers per rupee in 1890, and at Hindubágh from 20 to 40 seers, while

the price of judri in the latter tabell was As. 13 to Rs. 1-9-6 per maund.

RENTS, WAGES AND PRICES.

The prices of staple articles for each tahsil for the twelve years ending with 1904 are shown in table VIII, Volume B, and the prices at which revenue grains have been sold will be found in table XVI, Volume B. The following table shows the average prices of the principal revenue grains during the quinquennial period ending with March 31st, 1902, which was a period of drought in the District, as compared with 1904 which was a favourable year:—

Articles.	Price per maund (average of 5 years).	For 1904-05.		
	Rs. a. p. Rs	а. р.		
Wheat	2 9 1 2	0 11		
Barley	2 10 7 1	12 5		
Bhúsa	0 7 5 0	6 2		
Maize	2 6 9 2	0 5		
Juári	1 13 1 1	13 11		
Juári stalks	0 5 10 0	3 9		
Lucorne	0 5 10 0	5 0		
Rice	1 14 4 1	10 0		

The retail prices of wheat at Fort Sandeman for the three different periods were as under:—

		AVERAGE FOR							
		1893—1897.		1898—1902.		1904.			
February, first week	•••	Md. 8. 0 14	с. 0	Md.	в. 11	c. 8	Md.	13	c. 8
July, last week	•••	0 13	8	0	11	12	0	15	4

Prices in the District are also affected by the state of the crops in the adjoining districts of Déra Ismáil Khán and the neighbouring tahsiis of Músa Khél, Bárkhán, and Duki.

WEIGHTS
AND
MEASURES.

Weight.

Standard Indian weights have been introduced, since the British occupation in bazars of the head quarter stations, levy of posts, and important stages on main roads; a seer is of 80 tolas and a maund of 40 seers. The weights in general use are of five seers, two and a half seers, two seers, one seer, half a seer, quarter seer, one-eighth of a seer, chittack, and half a chittack. Larger quantities are weighed by spring balances, the use of which the people are thus beginning to learn. Bulky articles such as coal, fuel, fodder, etc., are dealt with by the maund of 82 lbs.

Measures Grain. of Outside the town and bazars, grain, ghi, etc., are still sold by wooden measures of various capacities, the measures in ordinary use being the following:—

Nim kurwae is the unit-

2 Nim kurwae	l kurwae.				
2 Kurwae	1 nim ozhae.				
2 Ním ozhae	1 ozhae or kúsa.				
30 Ozhae or kása	1 anda.				
60 Kásas or 2 andas	1 tstai.				

The nim kurwae, nim ozhae, anda, and ghundai or ghindai are merely nominal amounts, the wooden measures in daily use being the kurwae and ozhae or kisa. The capacity of this kisa varies in different parts of the District as will be seen from the following table:—

A-Fort Sandeman tahsil.

Locality. Equivalent of kása in Indian weights.

Wheat. Barley. Chína. Mung. Maki.

- 1. Abdullazai circle-
 - (a) Killi Shérak ... 5 srs. 4 srs. 8½ 5 5 srs.
 - (b) Mina Bázár and

other villages. 4 ,, 31 ,, 23 4 4 ,

2. Gustoi circle ... 3 ,, 28 ,, 21 3 3 ,

^{*} Called ghundai by Sanatias and ghindai by Sanzar Khéle.

```
Wheat Barley, China Mung. Maki. Shali.*
                                                              Weights
3. Mando Khél circle-
                                                              MEASURES.
    (a) Apozai and Sulai-
         mánzai villages. 4 srs. 3\frac{1}{2} srs. 2\frac{3}{4} 4 srs. 7\frac{1}{2}
    (b) Other villages ... 3\frac{1}{2} , 2\frac{1}{2} ,
                                          21 31 31 ,
4. Shíráni circle
                                          3\frac{1}{2}
                       ... 5 ,, 4 ,,
5. Kibzai circle
                        ... 41 .. 31 ...
                                          3<u>1</u>
                  B-Hindubágh Tahsíl.
                             Wheat. Barley. China. Maki.
1. Murgha Meh-
       tarzai, both east
       and west circles.
                               41 srs. 31 srs. 23 41 srs.
2. Hindubágh, Bábu
       China, and Khu-
       rásán circles
                                      31, 24
                                  . 24 . 1+3
3. Kazha circle
                      ٠..
                  C-Kila Saifulla Tahsíl.
                              Wheat. Barley. China. Maki.
1. Shádozai circle ...
                                4 srs. 3 srs. 3
2. Mírzai circle-
     (a) Dilai
                 Mírzai
            village
                                1 ,, 8 ,,
     (b) Other villages.
                                       2§ "
 3. Ali Khél circle
                                 4 ,, 3 ,,
 4. Musáfirpur circle-
   (a) Ismáilzai villages.
                                 5 ,, 33 ,,
                                                 33 43
     (b) Ghorezai villages.
                                 41, 83,
                                                  33 314
     (c) Sághra lands...
                                     , 21 ,
                                 34 ,, 27 ,,
     (d) Haidarzai villages.
                                                  2- 217
   In Haidarzai the ghindai used weighs 12 maunds, in
 other places it is 6 maunds, except in Barat Khél, Rustamzai.
 Salákzai, Safarzai, and Galazai where it weighs 4 maunds.
 In ordinary parlance, when reference is made to a kása, its
 equivalent weight in wheat is intended to be conveyed.
```

^{*} The kdsa for measuring all grains except shall is the same. That used for shall has a larger capacity.

WEIGHTS AND MEASURES. measures.

For weighing wool, a rough lever balance, known as tála largai or lakara, was formerly used in the Kila Saifulla and Miscellaneous Hindubágh tahsíls. It was made of a fairly heavy stick, three feet long and three quarters of an inch thick, the piveting point of which was determined by a standard weight. For this purpose 18 tumins which comprised 360 Indian, or 432 Kábuli, rupees made a maund. The point of suspension once ascertained was marked by a notch, and the stick was easily carried from one place to another. This stick has now been supplanted by the weighing scale. In Fort Sandeman the wool was, and is still, sold by the number of wargs (bundle of a sheep's wool).

Green fodder is sold by kurdus (plots). Bundles of dry lucerne (mora) in Hindubágh are sold by the number. Fodder and fuel are generally sold by the camel load, donkey load, or bullock load or by the pétai, i.e., the load which a man can carry on his back. Bhúsa is also sold by the heap (káhdán), and in Kila Saifulla by a netful kuown as savada.

Linear measurcs.

In the town and bazars the standard yard of 16 girahs or 36 inches has come into use, but the people of the country still employ the cubit (hatha), or the Kandahári yard (which is from 42 to 48 inches) for measuring cloth, káréz tunnels and mud walls. The hatha is an indefinite measure which varies with the stature of the customer and is measured from the projecting bone of the customer's albow round the end of the middle finger, when extended straight, and back to the second knuckle joint. In measuring walls and kárézes the length is sometimes extended up to the wrist of the right arm. In Kila Saifulla, for measuring walls the distance from the elbow to the tip of the middle finger is taken to be two spans (lwesht). Five such spans make one yard. Among the Mando Khélsa lwésht* is the distance between the tip of the little finger and that of the thumb of the right hand with the fingers spread out.

^{*} Persian bálisht.

During the survey the measures adopted in the Hindubágh and Kila Saifulla tahsíls were acres, roods, and poles, and records are prepared in these measures. But generally in the District irrigated land is known by the proportion of water attached to it, while unirrigated land is sold by plots or bands, measurements being taken by means of paces sticks, or ropes. Two paces in Kila Saifulla make one kadam (dáng). Thus the land and water under a permanent source of irrigation are both divided, and an amount of land is recognised which is attached to a shavaroz of water or other minor division. The term vivai • is frequently used but has no definite value, merely denoting the amount of land that can be ploughed by a pair of oxen in twelve hours.

WEIGHTS AND MEASURES. Superficial measures.

Some of the leading men, who frequently come in contact Measures of with Government officials, know the English months, but in the District as a whole the lunar year is still observed. The Arabic names of the months and their local equivalents are given below :-

time.

Arabic Name.	Local Month.
Muharram.	Hasan-Husain †.
Safar.	Safara.
Rabi-ul-awal.	Lumrai-Khor, Urmai-
	khor or Warambai-
•	khor.
Rabi-us-sáni.	Do-ama-khor.
Jamádi-ul-awal.	Dre-am-khor or
	Drema khor.
Jamádi-us-sáni.	Tslorama, Chalram or
	Ustarai-khor.
Rajab.	Alla Miásht or Khudai-
V	miásht.
Shabán.	Landai-barát, Rasúl-
	miásht or Ásúra.
Ramzán.	Roza.

Same as jora in the Quetta-Pishin District. The Shiranis and Haripals call this month Sare-kala.

WRIGHTS AND MEASURES. Arabic Name.

Shawal.

Local Month.

Alak Akhtar or Kam-

kai Id

Zíqad.

Manz-mián or Manza-

Zilhij.

Loe akhtar or Loe Id.

The seasons recognised by cultivators and flockowners are described in the section on Climate and Temperature.

The days of the week are those recognised by Muhammadans, Friday being the first day. The week among the Shiranis and Haripals commences with Saturday and the peculiar names given by them to the days of the week are as follows:---

Saturday.	Awal	Sabaq.
Sunday.	Do-am	,,
Monday.	Dre-am	,,
Tuesday.	Tsloram	,,
Wodnesday.	Pinzam	,,
Thursday.	Shpazhar	n ,,
Friday.	Juina.	

The day (waraz), and the night (shpa) are divided intothe following parts:-

Vernacular Name.

Explanation.

Kázib or Tera Mazae.

The period, a little before dawn.

Spéde or Spédo dágh.

Dawn After dawn.

Khar-Sahár or Kharavara.

Morning prayer time.

Sahar. Nimáza wakhat or Runz naminz.

Nimar tsarak.

Sunrise.

Tsásht or barazar.

10 а. м. 11 A. M.

Tándkai gharma. Gharma, Tákanda, or

12 noon.

Nima waraz.

Zawál or awal mápashín.

1 P. M.

WEIGHTS And

Vernacular Name. Explanation. Mápashín. 2 to 4 P. M. Ghat Mázigar, Awal 5 P. M. mázigar or Kaza mápash'n. Mázigar. 5 P. M. to sunset. Namar prewata. Sunset. Máshám or lumrai Evening. máshám. Tiúra máshám. Dusk. Mákhustan. Sleeping time. Midnight. Nima Shpa. Lumrai charg azán, 1 A. M. Do-am charg azán. 2 to 3 A. M.

Pésh-lamae.

Dre-am charg azán or

The divisions of the day most generally recognised are those connected with the Muhammadan hours of prayer, viz.—Sahár, gharma, mápashín, mázigar, máshám, and mákhustan.

4 A. M.

Before the British occupation the kaldár or British Indian Carrency. rupee was sparsely used, the Sikh coins known as the mírábi and Afghán coins being generally current. This latter currency is still used in dealing with Ghilzai powindahs. The market value of Kábulis, Kandaháris and Kiráns varies; at present (1906), a Kábuli fetches from Re. 0-7-6 to Re. 0-8-3, a Kandahári Re. 0-4-6, and a Kirán from Re. 0-3-0 to Re. 0-3-3. The place of all these coins has now been largely taken by British Indian coins, the local names of which are given below:—

Local Name.

English Equivalent.

Pái or páhai.

Half pice piece.

Nima paisa. Paisa.

Pice.

Pie.

Taka, loe paisa, tanga,

Double pice.

doapaisa or doapaiza.

Kaldår or Rupi.

WEIGHTS AND MEASURES Local Name. English Equivalent. Shái or Sháhi. 2 anna piece. Páo or páolai. Abbási, Kandahári or nimakai. 8

MATERIAL CONDITION OF THE PEOPLE.

Rupee. The late Amír Abdul Rahmán, who passed through Baluchistán during 1869, describes Sháh Jahán, the then acknowledged King of Zhob as "an old man, wearing a coat of old sheep-skin, which was patched in parts with different pieces of coloured cloth, where the skin was worn. wore on his head so dirty a turban as to disguise the material of which it was made. It also had no conical cap in the centre. On his feet were woollen socks, without any shoes. His mare was nothing but skin and bone, with bells tied to her knoes, and the saddle was of wood. The bridle was of hair-cloth with hells tied to the corners."

Local accounts also corroborate this description. In pre-British days when the country was in a state of anarchy, the dress of the people chiefly consisted of coarse materials, such as sheep skins, felt coats, and blanketing, while shoi or coarse cloth imported from the Punjab was used for turbans, trousers, and female shifts and wrappers. Shirts among men were used only on festive occasions. The food was poor and meagre, consisting chiefly of ogra or porridge made of judri, and millets, and was supplemented largely by fruits of wild trees, i. e., pistachio khanjak and olive, and by the wild plants pushai, nughara, etc Cooking pots, household furniture and ornaments of females were few. Boys went almost naked up to the age of ten partly because cloth was scarce and partly because until they began to wear shalwar or trousers they were not molested in tribal fends.

Since the British occupation there has been an appreciable improvement in the condition of the people more especially those residing in villages on principal routes and near head quarter stations of tahsils and outposts. This is due to a **

CONDITION

OF THE

PEOPLE.

175

settled Government and cessation from fends in which the MATERIAL tribes were formerly constantly engaged. The construction of roads, and the presence of a considerable alien population in the bazars have opened out better markets; and straw. fuel, and fodder, which formerly had little or no value, now fetch good prices. The more prosperous condition of the country is also shown by the better material now used for dress both by men and women, by the extension of agriculture, in the improvement of the villages and in the general rise in bride price (walwar) and marriage expenses. Local reports show that in pre-British days the bride price varied from Rs. 15 to Rs. 100, but now Rs. 300 to Rs 700 are paid. Tribes which in former days were nomadic are now gradually taking to agriculture.

Nevertheless there are still many tribesmen residing in the remoter parts of the District who do not as yet show any marked improvement in their standard of living, though among them too Indian piece-goods are now to some extent supplanting the coarser materials formerly used in dress. The continued droughts have also told on the material condition of the people more especially in the Upper Zhob Subdivision, and involved them in debt, as has been already* pointed out in the section on Agricultural Indebtedness.

The first Forest officer who visited the District was Mr. Elliot, who toured in 1892 to advise the Political Agent and possibiregarding the arrangements to be made for forest protection, and in 1894 a small establishment of one Forester and two Forest guards was sanctioned. Simple rules to prevent waste and destruction of the forests by promiscuous cutting were enforced and the system of rotation of areas open to cutting was introduced, it being ruled that as the forest in each area was cut, it should be strictly excluded from cutting and grazing for a term of years. The measures taken were effective in protected forests as far as wood-cutting was concerned; there were other extensive wooded areas.

FORESTS. Brief history lities of increasing forest reserves.

[·] Page 129, Chapter II.

FORESTS.

however, where the small forest establishment could not detect the transgression of forest rules.

The question of reserving certain areas having been raised, the Political Agent reported in 1897 that no pressing necessity existed for the complete reservation as State forests, of any of the wooded areas in Zhob, but asked that additional forest guards might be provided to enforce protective rules in Mír Ali Khél, Murgha, and Hindubúgh. As regards the chilyhoza or edible pine forests, he said that the Gustoi area and forests on the slopes of Takht-i-Sulaimán and Kaisa ghar, being remote from any market, were not in any danger, but Shin-ghar besides being in itself the most valuable of the three was comparatively near. In addition to these areas, there was a considerable amount of scattered chilghoza growth on the Shinsar hill behind Manikhwa, but this was not of any great value and the elevation of the range was not sufficient for chilghoza to thrive well. He. therefore, suggested that all permits for cutting chilghoza be given for Shinsar area only and that cutting be absolutely prohibited elsewhere, a guard being appointed for Shin-ghar to see that this prohibition was observed. The extra establishment of four guards was accordingly sanctioned, another guard being added subsequently.

Mr. E. A. Down, Deputy Conservator of Forests, visited the forest areas in the District in 1900 and submitted a report, concerning the improper use of the forest trees, which is embodied in the Forest Administration Report of the Province for 1899-1900. On receipt of this report the Government of India remarked "that it appeared that the pine and olive forests are in a deplorable condition and it is hoped, therefore, that it will be found feasible to reserve these areas, and to regulate the cutting of wood and grazing on some rational system."

These points were, so far as practicable, being attended to by the Political Agent when in 1903 Colonel C. Yate, C.S.I, C.M.G., then Agent to the Governor-General,

FORRSTS.

suggested that the forest administration in Zhob should be amalgamated with that of the other districts in Baluchistán. Bhai Sádhu Singh, Extra Assistant Conservator in charge of Forests in Baluchistán, was, thereupon, deputed to inspect the Zhob forests and to formulate proposals for the establishment which would be necessary, if the Zhob forests were placed under his charge. He inspected the forests in the Fort Sandeman tahsil in September, 1904, and reported that out of the 3,583 square miles, the total area of the tahsil, approximately 1,568 square miles were more or less covered with tree growth; and that out of this about 100 square miles were well stocked with chilghoza, nashtar, and pistachio. etc., and about 200 square miles with olive and Acacia modesta. He was of opinion that the 100 square miles referred to above were worth reservation as State forests for timber, fruit, etc., and also for climatic reasons; while the 200 square miles should be reserved for providing grazing during time of scarcity. He estimated that an establishment of one Forest Banger, one Forester, one munshi, and twentyone forest guards would be required for the protection and working of these forests. The reservation was to be carried out gradually in about ten years. The proposals are still (1905) under consideration. Arrangements are also being made to obtain the services of a qualified Forest Ranger.

Similarly further proposals are under consideration for reserving an area of about 16 square miles in the Hindubágh tah-il named Marzaghán, which contains a number of pistachio and other allied species; also for reserving an area of about 12 square miles of pistachio forest in the Kila Saifulla tahsil. The revenue from the royalty levied at Fort Sandeman has, during the ten years ending with March, 1905, averaged Rs. 3,031 per annum and the expenditure Rs. 1,125 per annum.

Pending the consideration of the above proposals, the Present (1908) forest management is still in the hands of the Political Agent who is advised, as occasion arises, by the Forest officer in

arrange-

FORESTS.

Baluchistán. The establishment maintained by the District authorities consists of a Forester and six guards, of whom five are employed in the Fort Sandeman, and one in the Hindubágh tahsíl, and their duties are mainly confined to looking after the trees noted in the margin* which have been

Local Names.

Obusht.

Khanjak.

(Uzgai). Sharg.

Shisham or zagha.

Phulai or palosa.

Lahura, Rohrai,

Lei, jháu, ghaz.

Bata, barrar.

Chilghoza.

Gurgala.

Zirga.

dah.

Farash.

Tayas.*

Kator.*

Jhand*

Karil. Píla. *

RESERVED TREES. Latin Names. Juniverus excelsa. Pistacia khanjak. mutica. Fraxinus xanthoxyloides (ash). Olca cuspidata Showan. (olive). Dalbergia sissu. Acacia modesta. Zisyphus nummu- Bér, karkan. laria. ozyphylla Tecoma undulata. Prunus eburnes (wild almond). Populus Enphratica (poplar). Tamarix articulata. indica Periploca aphylla. Pinus gerardiana. excelsa. Haloxylon ammodendron. Stocksia brahuica. Prosopis spicigera. Capparis aphylia, Salvadors,

declared as "reserved": and the cutting and of which is lopping regulated by rules con-Khanjak or Shrawan tained in the Agent to the Governor-General's Notification No. 2271. dated the 27th February. 1901. A brief description of the more important trees is given below. Sufaedar, spina, pa-

Both varieties of pistachio, viz., pistachio khanjak and pistachio mutica Riue pine, pashtar. are met with. khanjak is found elevations of from 3,000 to 8.000 feet, chiefly where clay and sand-

stone are met with. Its growth is scattered and sparse, and the tree is extremely slow-growing and difficult to rear. It seldom grows more than 80 to 40 feet in height and is generally lower, with a thick trunk 6 to 8 feet in girth and a rounded crown. In the Hindubagh tahsil there is the area of 16 square miles called Marzaghán already referred to which is specially looked after by a Forest guard; a well-wooded tract also exists in the Babu China valley. In Kila Saifulla the pistachio is found in Yákúb Fíroz Kánr and Altáz Kárézes as well as in Tar and

Pistachio.

These trees though reserved in other parts, very rarely occur in Zhob.

Shinglan. In the Fort Sandeman tahsil the pistachio mostly mutica (called shina) is found in the localities

> noted in the margin * mixed with ash, olive. etc.

Spéra-ghar. Bahlolsar. Planikhora. Urjas Sar. Taki. Stréza. Hasuband. Máníkhwa. Shinglan. Narai Lasbandi. Margabal. Wallah.

Pistachio is believed by the zamindárs to begin to bear fruit when twenty-five to thirty years old and is said to live to a great age. The average vield of a full grown tree is about 14 seers. The fruit is eaten both fresh and dry. It is con-

sidered warm and stimulating but is constipating. The Kákars believe that in years when there is abundance of fruit, the fertility of their women increases. A powder made from the dried fruit, mixed with wheat or maize flour, and made into a kind of porridge called pusa or shandlyha is much relished. Oil for lamps is extracted from the fruit, which is also eaten and used as an unguent for the hair. Among the people of the country it is generally believed that a seed does not germinate unless it has either passed through the stomach of a chikor or the outer outicle has been removed with the teeth. Experiments, made by the Forest Department in the Quetta-Pishin District in 1902 and 1904, however, indicate that khanjak could be successfully reproduced from seed under favourable circumstances, which are that the soil should be somewhat rich, that the seed should be sown before the spring season and that moisture should be available in the seed beds.

The juniper is only found in the south-western corner of Juniper. the Hindubágh tahsíl, notably towards Súrghund.

The wood is light and though not strong withstands the action of moisture to a remarkable degree. It is used for making water channels (tarnawas), house-posts, and beams. The species is extremely slow in growth and never attains a great height, few trees being over 60 or 70 feet in height. The fruit, which is known as palo by the Pathans. appears in spring and is believed by the people to ripen in

FORMTS.

FORESTS.

the third year. For food, the berries are boiled in a small quantity of water, when they become like jelly and blackish in colour. After extracting the kernels, the jelly (dúsha) is eaten by the poorer classes, more especially in times of scarcity. It is also believed to be a cure for colds. The jelly is sometimes mixed with ghi and used for tanning the skins (zik) in which ghi is stored, as the resinous substance sticks to the skin and prevents percolation. The green leaves are also used for medicinal purposes. Up to the present time the berries have not been found to be of any commercial value owing to the forests being at a long distance from any market.

Olive.

The wild olive (showan), a middle-sized tree, is found throughout the District but mostly in the Fort Sandeman tahsil. Its hard and durable wood is largely used for agricultural implements as well as for timber and fuel. The leaves are used for feeding goats, and oil is occasionally extracted from the fruit. Mr. E. A. Down, Deputy Conservator of Forests, Baluchistán, who inspected the Zhob Forests in March, 1900, remarked that all the olive forests in the District were of one type, i, e., pollards, due to excessive lopping which must have been going on for very many years, and which still continued. suggested rotation areas for coppice and recommended that a certain area should be closed against grazing, and the seeds of the pollarded trees be sown to find out whether they possess sufficient vitality for germination so as to produce good natural reproduction. Mr. Down's successor. Bhai Sádhu Singh, who visited the District in 1904. further suggested that certain selected areas situated at long distances from villages should be closed to grazing except in times of scarcity, that well-wooded areas in the vicinity of villages be reserved, if practicable, to afford pasturage for the village cattle in time of scarcity, and that areas in which restrictions for grazing and browning could not be imposed might be managed as "unclussed forests"

and treated as pasture lands, i. e., they should be kept

FORESTS.

 Murgha Bábar, Sanghe-ghar, Bahlolsar.
 Planikhora, Urjas Sar, Taki. Strésa.
 Hasúband.
 Marikhwa, Shinsar.
 Narai Lasbandi, Chachobi. open to grazing with the only restriction that the green trees should not be cut or dangerously lopped. The clive is found in the localities noted in the margin * sometimes mixed with khanjak and ash.

Chilahona.

The edible pine (chilghoza) is a moderate sized tree found generally at altitudes between 6,000 and 12,000 feet. heart wood is yellowish-brown, hard, durable, and resinous, The fruit being edible, is exported to Déraiat and the Punjab. Resin is also extracted from the chilghoza wood, and is a cure for mange in camels and goats. This tree predominates in the Shin-ghar, Margabal, Parai, Sharghalae and Takht-i-Sulaimán hills and is also found along the summits of Spéra-ghar and to some extent in Shinsar. In 1900 Mr. Down reported that the Shin-ghar chilghoza forest was in a poor condition and that a considerable number of trees were dead and dving, owing to age, coupled with severe conditions of climate, scanty rainfall, and poor and insufficient soil: there was very little natural production due most likely to the annual collection of seed for consumption and sale and also to the area being severely grazed over, little or no cover being left to protect any germination that happened to take place. He recommended the introduction of a system of rotation for the collection of seed in the chilghoza forests and the entire closing of the Shin-ghar forest to grazing, cutting, and seed-collecting. As regards Sharghalae forest he said that it was the only one from which building timber was exploited for Fort Sandeman or elsewhere. The existing dead wood of this forest would be sufficient for the purpose for some years and when finished, Shin-ghar could continue the supply and finally the Takhti-Sulaimán forest might be indented on. Parai chilghoza

FORESTS.

forest should, he said, be also closed to grazing, grass and bush cutting and seed collection. Bhai Sádhu Singh. after inspecting the forests in 1904, proposed that all the best stocked forests of chilghoza trees might eventually be reserved. He found that a large number of seedlings were growing under the thick shade and protection of shrubby growth, a fact which corroborates the views of Mr. Down concerning the injury to regeneration by heavy grazing. Mr. Stebbing, Forest Entomologist to the Government of India, visited the Forests in 1905 and wrote an interesting note* on the chilghoza bark-boring beetles, which were doing considerable damage to the Shin-ghar forest. Bhai Sadhu Singh's subsequent inspection showed that in the tract called old Shin-ghar (51 square miles) 268 trees had been recently damaged by these insects while in new Shin-ghar (21 miles) where regular enumeration was adopted, the result was as under :-

Sapling	gs and se	edling	s	•••	•••	1,527
Trees	under :	12 " iı	n girth	at	breast	
	height			•••	•••	587
Do.	from 1	2" to 1	l8 "	•••	•••	1,460
Do.	from 18	3" to 2	24"	•••	•••	1,447
Do.	from 24	l" to 8	80"	•••	•••	860
Over	30"		•••	•••	•••	357
Dead (rees	•••	•••	•••	•••	982
						5,693
W=000	found no	oontle				7,220
	found re	-				
	down and					83
From the mortality a	_		the re	gener	ation an	d excessive

^{*} A Note on the Chilghoza (Pinus Gerardiana Bark-boring Bestles of Ehob, Baluchistan, by B. P. Stebbing, F. L. S., etc. (Calcutta: 1908.)

This is a large gregarious tree met with at elevations of Forests. from 8,000 to 11,000 feet. Tar is extracted from it. Its timber is also used to a small extent. It is found on the Pinus coccles Ter-ghar hills as well as on Takht-i-Sulaimán.

Acacia modesta (palos) grows on the steep slopes of the Acacia modes-Dahánasar, where it is found mixed with a scattered growth ta. of chilghoza. It is a middle-sized tree and produces good charcoal.

Ash is generally found mixed with pistachio, olive, etc., Ash. but it is nowhere gregarious.

Among minor products may be mentioned cumin seed, Minor prohyssop, rhubarb, asafoetida, and the plants known locally as réwand chini and malkhozai.

A gregarious herb (known as zira) which grows wild in Cumin seed the Shin-ghar and Tor-ghar hills in Kila Saifulla and in the Cyminum). Hindubagh and Fort Sandeman tahsils. The herb becomes green in early spring and about the end of March the stem appears and is followed by white flowers. The seed or fruit ripens in June, when men, women, and children repair to the hills and pull out the plants, which when dry are threshed with a stick and the seed separated. As a medicine cumin seeds are considered aromatic, carminative, and stimulant. They are also stomachic and astringent and useful in dyspepsia and diarrhoa. The principal use The annual produce of the seeds is as a condiment. in a year of good rainfall is about 1,600 maunds and the average selling price is about Rs. 8 a maund. During 1899-1900 experiments were made in the District in the cultivation of zira, but they almost all proved unauccessful.

The herb (zúfa) grows in the hills in the Hindubágh and Hyssop Fort Sandeman tahsils. It sprouts in the beginning of officinalis. April and is gathered about the end of May. The annual produce in the District is about 100 maunds and it sells for about Rs. 10 a maund. The herb is used in sharbat as a cooling beverage in cases of fever.

Ponueti.

Rhubarb (pushai) grows plentifully in years of good rainfall in the hills in the Hindubágh and Fort Sandeman tuhsíls. It ripens in May. The stem is generally eaten raw after the skin has been removed and has an acid taste. It is also cooked with flour of wheat, barley, or maize, and a sort of porridge is prepared. A preparation of the leaves which is called arvae is much eaten by the poorer classes.

Rhubarb (Rheum emodi).

Heward chini This plant grows all over the plains and mountains in the (sakhryai). Though abundant in years of good rainfall it is also to be found in dry seasons. It is a medicinal herb used for its curative properties in itch. It is also administered with water to infants in stomach complaints and inflammatory conditions of the skin.

Malkhoeai (mulathi). This herb is common in the Hindubagh tahsil. It is used in the treatment of cough and other chest complaints.

Asafoetida.

This plant occurs in small quantities in the Zhizhabáshae hill, a continuation of the Spín-ghar range, lying east of the Husain Nika shrine in the Fort Sandeman tahsíl. It is used as a drug.

Arboriculture.

The planting of trees along the road sides at Fort Sandeman was begun in 1891-2 when a sum of over Rs. 450 was expended from Provincial Revenues for planting on the station roads. Up to 1903-04 the expenses were met from these revenues, but from April, 1904, the charge has been transferred to the Fort Sandeman Bazar (Excluded Local.) Fund. Greater attention has been paid of late years to the improvement of arboriculture. The principal trees on the roads at Fort Sandeman consist of poplars, mulberries, and wild willows. There are ten gardens at Fort Saudeman, the principal one being the Government Garden maintained by the Fort Sandeman Bazar (Local) Fund. A piece of culturable land measuring about 6 acres situated to the east of the hill, on which the Political Agent's Bunyalow stands was converted into a garden in 1904. A large number of fruit-trees have been planted in it. Trees were also planted in the compounds of the various rest houses in the District in 1900

The minerals of commercial value found in the District MINERALS. are salt, asbestos, chromite, coal, and saltpetre.

Salt is manufactured or produced at the Jalálzai, Daulatzai, Salt. Sibzai, Mírzai, and Ghorézai maltanis (salt tracts) in the Kila Saifulla tahsil, lying in the hills to the north of the Zhob valley and held by the Daulatzai, Sibzai, Ghorézai, and Jalálzai Kákars; in Huramzai in the Fort Sandeman tahsíl; and in the country of the Lawanas in Kamr-ud-din Karéz in Hindubagh. In Kila Saifulla pits (kishts or kiáris), are dug in the land impregnated with salt and filled with water. After fifteen or twenty days the water evaporates and a crust of salt remains. Salt is generally made in summer but can also be made in fair weather in winter. In Fort Sandeman a quantity of salt impregnated earth is put in a vessel and water mixed with it. The water evaporates and the residue is used as salt. In Hindubágh salt is not manufactured, but saline efflorescence is collected and used as salt. In Kila Saifulla a tenant has to pay from one-fourth to onehalf of the out-turn as rent of the land to the proprietors. The manufacturers are everywhere local men. Samples of salt manufactured in the salt tracts in Kila Saifulla were examined in January, 1897, by the Chemical Examiner. Puniab, and were found to contain from 81 to 91 per cent. of sodium chloride. The annual estimated out-turn of salt in Kila Saifulla is 1,300 maunds, in Hindubágh 600, and in Fort Sandeman about 100 maunds. Indians temporarily settled in basars and tahsil head quarters use the Punjab rock salt. The local or Zhob salt is used by the people in the Zhob and Loralai Districts and in the Shahrig tahsil of the Sibi District. It is also exported to Tarnak and Arghandab in Afghanistan. No duty, or restriction, has yet been imposed on Zhob salt. The local salt is generally bartered for grain and at the maltanis it sells for about Rs. 1-4-0 a maund.

Chrysolite also known as fibrous serpentine or Canadian Asbestos. asbestos, occurs in large quantities amongst the intrusive serpentines that border the Zhob valley, both to the north

MINES AND and south, and which from there extend westward into the Pishin District and east and north-east as far as the Tochi valley. The mineral is particularly abundant north-west of Hindubagh near Tilérai Jan Muhammad on the road to Murgha Fakirzai, where it fills a complicated net work of cracks of all dimensions which seem to result from the shattering of the serpentine rocks. Several hills consist entirely of this curious formation.

> Samples were sent for examination to Mr. W. R. Dunstan. Director, Imperial Institute, London, who supplied the following information in June, 1903:-

"This sample (No. 16026 sent from Zhob District in Baluchistan) consisted of Asbestos fibre, contaminated with much extraneous mineral matter. The fibres were white. soft, fairly strong, and resistant to heat. As it was evident that the fibre in this sample if separated from the associated mineral matter, would be more valuable, a selected specimen (afterwards referred to as No. 16026-A) was prepared for submission to experts. The samples were submitted for commercial valuation to two of the principal firms of asbestos manufacturers. The reports thus obtained agree in stating that with the exception of the specimen No. 16026-A already described as selected at the Imperial Institute from the crude sample No. 16026, none of the samples of asbestos are of any commercial value. No. 16026-A was valued at about £2 10s. per ton. It is possible that the poor quality of the samples was the result of the asbestos having been weathered and a better material may be obtained. by mining at a lower level, where deterioration as the result of exposure to the atmosphere could not take place. It may be mentioned for the information of those interested in developing a trade in Indian asbestos, that asbestos to be used for manufacturing purposes should be free from grit and foreign mineral matter, should be of fairly long fibre and should not be affected by heat or acids. The most important requirement, however, is that the fibres should possess

sufficient tensile strength to be carded and spun into yarn. MINES AN Short fibre asbestos is only suitable for the preparation of non-conducting packing materials and the manufacture of asbestos board, and even for such purposes the requirements of purity and high tensile strength of the fibres are also necessarv."

Chromite exists near two places in the Torjang hill, viz., Chromite. Inzargai and Amrán; also at about 51 miles from Hindubágh on the road to Spérarágha and at a spot 14 miles south-east of Hindubágh on the Chinjan road. Leases for working the chromite in three out of the four localities were obtained by Mr. C. R. Lindsay, and that for the locality on the Spérarágha road by the Baluchistán Mining Syndicate. The former has done no work, while the latter worked the mine for a while and then abandoned it. The chief difficulty seems to be the cost of carriage from the mines to the nearest railway station at Khánai,

The following report on the Chromite of Baluchistán was written in 1906 by Mr. G. H. Tipper, Assistant Superintendent of the Geological Survey of India.

The chromite of Baluchistán was discovered by Mr. Vredenburg of the Geological Survey in 1901. His original report cannot now be traced. From Khánozai to Hindubágh are great exposures of gabbro and serpentine of upper cretaceous'age. The gabbro, a basic intrusive rock, is the true home of the chromite in which it occurs as a primary constituent. Chromite does not occur in the gabbro in masses of economic value. The change from gabbro to serpentine by hydration allows of the segregation of the chromite into ore-bodies of payable size. It is in the serpentines only that valuable chromite is found. The serpentine is a fairly hard massive rock. The chromite occurs in pockets in the serpentines. No continuous veins were noticed, but the pockets seemed to be situated on a N.-E. to S.-W. line, so that the discovery of one deposit probably leads to the location of another. The ore being a

MINE AND dark crystalline mass, it is easily recognised. It is usually in sufficiently large quantities to be extracted with little or no sorting. Observations made in this laboratory give its specific gravity as 4.297 and the percentage of chromium sesquioxide as 54.11 per cent. Many specimens range even higher in the amount of oxide. At the present time Khánozai is the only locality at which ore is extracted. Hindubágh is apparently too far from the Railway for convenient transport. At Khánozai the mines are not yet beyond the open quarry stage. The method seems simply to quarry away the serpentine until a deposit of chromite is exposed whon it is extracted and so on. Transport is entirely by camels. Labour is chiefly Pathán. The number of men employed is inconsiderable. The working is restricted to the months during which the quarries are free from snow. The output is not very large and is available. This is due to the limited market, to the short time during which quarrying can be carried on, to variations in the size of the pockets, and to the difficulty in locating them.

> With regard to the possibility of an increased and continuous supply of chromite it is very difficult to express any opinion as the ore has not yet been proved to any great depth. There is one point which it is necessary to emphasise. The area over which concessions for mining have been granted is very small in comparison with the total out-crop of serpentine in which chromite may be expected to occur. Extended prospecting operations would almost certainly lead to the discovery of more chromite deposits.

Baltnetre.

Saltpetre is manufactured generally in winter by individuals in Kila Saifulla for their own use and there is no trade in it. Salt impregnated earth is taken and put in a vessel filled with water, and allowed to stand for a day and night. When the earth has settled down, the saline water on the surface is taken off and boiled till it thickens. it is then poured into another vessel, and put in a cool place, when it condenses. The water is thrown away and MINES AND gunpowder made from the saltpetre.

Coal is found in Maltani Mir Alam, Sikandar Sari, and Coal, Spinaghar, in Kila Saifulla. It was first noticed at Maltani Mír Alam in June, 1899, when a well was being dug to provide the saltpan with water. A specimen was examined by Mr. G. Henderson, of the North-Western Railway, who. after making rough experiments with it, considered it useless. At his suggestion, however, a heading was put in in November, 1899, with the result that traces of two small veins of about & square inch in section were followed up. One of them ended without any increase of section beyond 6 inches. The other did not end as far as excavation went, but showed no sign of increase in volume or of improvement in quality. It was, therefore, concluded that there was no probability of coming upon a workable vein. Captain A. L. Jacob, Assistant Political Agent, Zhob. visited the locality again in 1900 and reported that all that could be got out was shingly earth and stones with here and there a trace of what seemed a very inferior coal: and that it did not seem worth while spending more money in trying to follow up the vein. He also visited Sikandar Sari and obtained a specimen of coal which was found to be of very inferior quality. Captain Jacob also visited another place in the Perchi hill and found a vein of apparently good coal about a yard wide by 9 inches thick : there were distinct traces of the vein running horizontally in the side of the bill for quite 8 yards, after which it disappeared into the hill. There was a small spring of water within a quarter mile of the spot where the coal vein exists. The place was, however, difficult to get at and it was calculated that the working expenses plus carriage to Khansi railway station would raise the price to over Re. 1 a maund—a prohibitive price.

In the summer of 1902 when Majer C. W. Jacob. Commanding the Zhob Levy Corps, was on a tour of Minerals.

MINES AND inspection of the Zhob Levy Corps posts in Kákar Khurásán, he was given some pieces of coal and bismuth and informed that these minerals abounded in a part of Kila Saifulla tahsíl, near the Késhatu post on the bofder. An analysis of the pieces in the office of the Geological Survey of India gave the following result :-

Moisture	•••	•••	5.63	per ceut.
Volatile matte	er	•••	33•08	,,,
Fixed carbon	•••		42.24	91
Ash		•••	19.05	27

Total ... 100.00

This analysis makes it inferior to the coal worked by the North-Western Railway at Khost and it was evident that it would only pay to work the coal for purely local consumption. The ore sent as bismuth was examined by the Reporter on Economic Products to the Government of India who found it to be iron pyrites containing 43.86 per cent. iron and 41.99 per cent. sulphur, and that the iron ore was not a good one. The coal found at Spin-ghar about 50 miles north-east of Kila Saifulla is reported by the Mining Overseer, Baluchistan, to be good and with better heating power, than that of the Sor range in the Quetta-Pishin District.

The following report on coal in the Zhob District was furnished in 1906 by Mr. G. H Tipper:-

"The coal occurs on the slopes of the Spin-ghar, Toi river, Zhob District, latitude 31° and longitude 68° 46°. It is about 50 miles from Kila Saifulla and 130 from the Railway. There is no practicable road into the Zhob valley.

"The geological formation is a series of soft green shales and sandstones, which are known as the Laki group. It is the same as that in which all other Baluchistan coal is found. At the time of my visit the out-crops were much obscured by debris and as no coolies were available, it was difficult to make out all the details of the occurrence.

"Only two exposures could be examined. The seam is MINES AND thin, not more than 2 feet thick. The strike seems to be from north-east to south-west and the dip high. The roof and bottom of the seam are two layers of soft sandstone.

"The coal which has been crushed is splintery and of a bright black colour. It burns with a clear, bright flame.

"An analysis made in this laboratory gave the following result :---

> Moisture 3.67 per cent. Volatile matter... 39.14 Fixed carbon ... 51.89 Ash 5.30

> > Tutal ... 100.00

"Colour of the ash light grey. Cokes strongly.

"This analysis shows that this coal is similar in composition to other Baluchistán coals.

" Considering the distance of the locality from any large centre and the difficulty of mining a thin seam in such a pour rock I do not think that the coal can be of any value at present. In the event of a Railway being built through the Zhob valley, the locality would be worthy of further notice."

Oil springs have been found near Mughal Kot in Dahána Miscellaneous Sar. The quality of the oil has been pronounced to be Petroleum. excellent, but further examination of the neighbourhood by a geologist is necessary to prove whether petroleum exists in workable quantity in the District.

Mill stones can be got from the Tang Haidarzei hill in Kila Saifulla. Building stone abounds in the hills southeast of Fort Sandeman.

Embroidery is common among the Afghan women in the ARTS AND District and before the British occupation was generally done in cotton, but now silks are largely used for the pur- Embroidery. pose. It is of many varieties, but unfortunately the products have been much damaged by the introduction of aniline

ARTS AND MANU-FACTURES.

dyed silks. The work is done on the sleeves, collars, backs, shoulders and pockets of women's and children's shirts. Men's shirts are also sometimes embroidered as well as the women's wrappers, especially the head portion, handkerchiefs, caps, antimony-pouches, and trouser strings. Thirty-four designs are known among the Sanzar Khels, the best being the chakan embroidery on collars and sleeves, and on women's shirts : and the tarbuzae worked on women's breast-pieces and on antimony-pouches. The Sauatias of Hindubágh know eighteen varieties, the best being the jowaki work on the shoulders of men's shirts, the drakhta on the women's breastpiece and kári tsátski done above the drokhta. The Mando Khéls have twenty designs, of which the gul embroidery worked on the back of children's shirts and tawiz done on the collars of men's shirts are considered the best. The Shiranis also know fourteen varieties, of which the gardudn gul on breast-pieces of women's shirts and loi test on the backs of men's shirts are much valued. Some of the Sanatia women have also learnt gold embroidery work.

Carpets and other woodlen fabrics.

Rugs (kamballa) in the darri stitch and generally striped, are manufactured by a class of professional weavers known as péshawar. The wool is cleaned, spun, and dyed by the owners and then a péshawar is called in to manufacture the kamballa. The following description of the processes followed is adapted from a memorandum by Mr. B. A. Gupte, Assistant to the Director-General of Ethnography in India:

The wool, which is either of sheep or camels, not of goats, is spun by the women and the only implement used is the charkhae. It is a spindle of the most primitive type, made of a pair of pieces of wood crossing each other at right angles, with an upright handle fixed at the joint which has a notch in it. A bandle of thread is called spandakh. The loom (kanrae) is equally primitive, although the work turned out is very clever. It consists of four pegs, fixed in the form of an oblong, the breadth being about 3 feet and the length 9 feet. Between the first two pegs, called

mazhwae, is tied the beam named sar largue. Another beam ARTS AND is similarly tied to the pegs at the other end called the FACTURES. pás largas.

MANU-

Before commencing work, two poles are set upright in a triangle over the warps about 3 feet from the first beam. They are called burgar, and are held in position by a rope stretched above the warp and fastened to two pegs beyond it at either end. To the triangular burgar is tied a horizontal cross beam called kasho largue. To the kasho largue are attached by ropes, two or four curved or triangular sticks (wúzas) which regulate the action of the heddles. The strings connecting the heddles (wori) with the curved sticks on the cross beam, are called kasho palao or kasho tanráo. As the weaver goes on weaving the carpet, he has to tie the outer ends of the borders to two sticks which are tied together and form a stretcher. They are called lindai. The stretcher is moved forward as necessity requires. The comb with which the west is driven home is called zhamunz. Armed with this the weaver proceeds by passing each thread of the warp through the heddles in the way he has been carefully trained to do in order to regulate the designs. He has no plan nor can he recount or sing the numbers, as pile-carpet weavers do, and he can produce only a few geometrical designs. The warp is called warolau, when arranged. The west when laid is called nas. It will thus be seen that a distinct name is used for each of the materials used and even the weft thread, before it is passed through the warp or "laid" is distinguished by a separate name, pot. The fabric is known as sargah, when the designs run both lengthwise and crosswise, and khatti or nagshi, when the design only runs crosswise; plain work is called sada. One end of each of the threads of the warp is tied to the first beam, and the other to that at the farthest end. The heddles are next tied with the kasho palao to the cross beam. In cotton weaving, and even in woollen blanket-weaving in other parts of India, sizing is the first

ABTS AND MANU-FACTURES process, but in carpet-weaving it is not necessary, and no size is used as the outer ends of the "hair" or wool have to be left loose to cover the interstices. The west-thread is carried through the warp-thread by the weaver withe a shuttle (skhustae) and passed in and out in accordance with the design he carries in his head. It is then pushed home or "laid" with the comb (zhamunz). The process is tedious. The péshavars generally work in couples, and they finish a sargah carpet, 2 yards by 3 yards, in about a month; a khatti or naqshi in a fortnight and a shda in three to four days. When the carpet is ready, the women embroider it with shells or bones. The other articles manufactured in much the same way are the following, though the methods used are rougher:—

- (1) Blankets for kizhdis (tágae).
- (2) Ghindae or ghundae (sacks).
- (3) Laturae (pillow cases).
- (4) Khurjins (horse saddle bags).
- (5) Sarai (blankets).
- (6) Kundarae or bakhtai, woollen cloth for placing bread on.
- (7) Panzai for keeping baked loaves of bread.
- (8) Aringai, placed under a hand-mill when corn is ground.
- (9) Tobra (horse nose-bag).
- (10) Táng (horse girth).

Ropes are also made in the District by the women from camel or goat's hair. In Kila Saifulla each hamlet has a péshawar of its own who is reckoned as a village servant and is given by each family, a milch goat or sheep as his fees (lwazhgi) which he returns when dry; the flockowners also give him once a year the wool of a single sheep or As. 8 in each. The péshawar does not charge them for making nose-bags, horse girths, and pansai or cloth for keeping bread in. In other parts of the District the weavers

^{*}The yard used is of 43 inches.

195

move from village to village, get their food when employed and wages for piecework. The Sanatia Kakars of PACTURES. Hindubágh pay cash wages in a lump sum varying from Rs. 10 for a carpet about 11 by 3 yards to Re. 1 for a ghundi or sack, the tent pieces (taque) being paid for at As. 4 a yard. The Sanzar Khéls of Hindubagh and the people of Kila Saifulla and Fort Sandeman generally pay the weaver's wages in grain which vary according to the nature of the work, from 40 kisas of wheat for a carpet to l a kúsu for a bakhtai.

In pre-British days when cloth of every kind was scarce, Felts and felt coats formed the principal article of male attire and Kosae. this is still the case among many of the poorer classes of Kákars. Felt or krásta is made of sheep's wool by the women for local use by a simple process. The sheep are first washed and then shorn by the men, all other processes are carried out by the women. After shearing, the wool is well beaten with pomegranate, tamarisk or other sticks. cleaned and made into parcels of about 2 scers each. The process of cleaning is locally called khapan. The cleaned wool is then wrapped round a stick, and is called wardinga-A thin darri of the required size is spread, and small pieces of wool are laid by the women over the whole of its surface after which a second layer is added. If a variegated krásta is to be made, coloured wool is used. Warm water is sprinkled over the layers of wool thus prepared, and the darri is then carefully and securely rolled up, after which it is rubbed and pommelled with vigour. Every half hour or so a glance is taken to see if the wool has begun to felt and more warm water is added; after felting, the krásta is taken out and placed in the sun to dry. This process is continued for three days, more wool being added each time, until the felt is ready for use. Its compactness depends on the rubbing it receives. If a large krásta is to be made. the womenfolk from among the neighbours are called in to assist, and are given food. The women of the Ghilzai

ARTS AND MANU-FACTURES. nomads, who periodically visit the District, make a superior kind of krásta which is sometimes offered for sale. are generally well felted and are occasionally ornamented. Long coats (kosae), and short coats (grátai) are cut out of the felt and sewn with a large needle and woollen thread. The sleeves are generally closed at the ends, the coat being worn as a cloak with the sleeves depending.

Copper work.

There is a coppersmith (misgar) in the Fort Sanaeman bazar, who carries on a brisk trade. The copper is imported from Sind and various kinds of utensils and pots are manufactured and sold by the weight. The vessels which are most in demand in the District are the gadwa and badnai (jugs with spouts). The gadwa is to be found in almost every household, and it sells at Rs. 2 to Rs. 4, while a badnai costs from Rs. 1-4 to Rs. 2. Next to the gadwa and badnai, the copper vessels in use are the dégs (cooking pots of various sizes). The people of Kila Saifulla and Hindubagh get their vessels from the Fort Sandeman bazar or the bazars at Quetta, Pishin, and Loralai.

Silver and

There are a few goldsmiths, chiefly Punjábis, in the gold smiths. Fort Sandeman bazar, who work mostly for the Indian population. In the District Ghilzais work as goldsmiths and have shops in important villages in the Fort Sandeman tahsil, six shops in the Kila Saifulla tahsil and two in Sanzili in the Hindubagh tahsal. They make the few ornaments used by the local people, chiefly made of brass and zinc and some of silver. The average rate of wages charged is one-fourth of the silver made into ornaments, or As. 3 to 4, per tola. Generally people who want silver ornaments made for them, use for the purpose the coin known as the Kábuli, it being not common to supply silver in bullion.

Leather work.

Shoes imported by the Hindu shopkeepers and Násars from Multán have come largely into use in the District. The poorer classes use gaulis or tsaplis (sandals) which are made locally from raw skins and cost from R. 1-4 to . .

Rs. 2-8 a pair. Other leather articles made by the local ARTS AND women everywhere in the District are the banai or skin for MACTURES. storing flour and household articles, the gudae or waterskin, the wuzan or skin for keeping ghi, and the gharak or skin for churning curds. Into a sheep or goat skin 2 seers of crushed barley are put. On the third day the barley is taken out, and the skin is well rubbed with the hands and against a wooden peg stuck in the ground. When the skin is dry it is ready for use as banai. It is sometimes coloured in an infusion of dry leaves of apple or of loarand (madder), and embroidered with shells or lones. Such coloured banais are given as marriage presents to a bride on her wedding. For curing a gudae or wuzan the uma (Ephedra pachyclada) twigs are beaten and put into the goat's skin which is filled with water. The process is repeated every week. After the third week the skin is Gharak (skins) are cured with the plant known fit for use. as shorae (Haloxylon griffithii). About 3 seers of twigs are beaten and put into a skin with water. After a week the water and twigs are taken out and fresh water mixed with ashes of the shorae is then put in the skin for an hour when it is fit for use.

In the Fort Sandeman tahsil the Mando Khels and Postins. Shiranis make postins or sheep-skin coats for themselves. the method of dyeing skins being as follows :-

If the hide is fresh, about 2 chittacks of saltpetre are sprinkled over it, but if the skin is dry, it is first moistened with water and then saltpetre sprinkled over it. The skin is then carefully wrapped up. On the following day the skin is unfolded, sprinkled with water, and again rolled up. On the third day the saltpetre is shaken out, any pieces of flesh which may have adhered to the skin are scraped off with a piece of stone and the skin well rubbed with the hands till it is soft. A dough is then made of barley flour and applied to the skin, which is rolled up and kept for two or three days, when the dough is removed, the skin rubbed.

ARES AND MANU-PACTURES and dried. When twelve or thirteen such skins are ready, about 4 seers of shinas (pistachio nut) are well powdered, mixed with water and made into a paste, each hide being plastered over with it, and kept thus for two days. On the third day the plaster is shaken off and the skins are rubbed with the hands. About 4 seers of the root of the spánda (Peganum harmala) plant are then well powdered and boiled. A dough is prepared by mixing this decoction with the articles named below and kept for a day: 4 seers of the rind of sour pomegranate, 2 chittacks of alum and a chittack of turmeric well powdered and mixed. On the next day half of this preparation is put in a vessel containing water sufficient to turn the whole into a paste. This paste is then made tepid and applied with the hands to the skins, which are again wrapped up and kept for a day. Next day. the remaining half of the paste is similarly applied and the skins are again rolled up and kept for two or three days. The plaster is then shaken off and the skins are rubbed with the hands. The whole process turns the skins yellow. If shinae is not available for dyeing, the pomegranate rind, alum and about half a seer of ghi are used for the purpose. When the skins have been thus dyed they are cut into suitable sizes by an expert, and the women sew the pieces together. When the postin is ready, it is lightly wrapped up and tied so that it shall not get creased, and kept in this condition for two or three days when it is fit for use, Excepting the cutting, all other processes are done by women. Twenty skins of lambs or twelve of sheep make one postin. A postin made from sheep skins costs between Rs. 6 and 10 while one made of lambs' skins costs from Rs. 10 to 15. Red wool postins are preferred to others.

Dyeing.

The Fort Sandeman bazar has three shops of alien dyers who now and then visit the villages and dye clothes, cloth, and wool there. Cloths are generally dyed black in this tahsil, the charge being one anna per yard. Wool is dyed in all colours at the rate of As. 4 a secr. Several women in

each village in the District know the art of dyeing wool. ARTS AND The Sanzar Khel women, however, are more expert in the FACTURES. art.

The colours generally used are shin (blue), sur (red), zarghún or malaghún (green), tor (black), and zhar (yellow).

The spina zamai plant occurs largely in the lands of the Crude carbon-Bátozais in Kila Saifulla, and the Násar nomads make khár or crude carbonate of soda from it in August and September. The quantity manufactured is, however, small and is only for home consumption. A description of the method of manufacture will be found on page 188 of the Quetta-Pishin

Gazetteer.

ate of soda.

Násar Powindahs bring from the Dámán bowls and Pottery. which they barter for wool. The earthen pots in common cups use are few and are made by local women for their own use: the poorer women also make them for sale. The price of a large katao (cooking pot) is from 11 to 2 kásas of grain, of a small katao or a gontai from \(\frac{1}{2} \) to \(\frac{3}{4} \) of a kása, of a kúzae or badnai (water-bowl with spout) from 1 to 11 seer and of a kundae (trough for kneading dough or leavening yeast) from 11 to 3 seers of grain. The price of a luraghai or lástawae (milking-bowl), and of a kúnjae (bowl without spout) and jarai or sharombai is its capacity in grain.

Trade is not systematically registered in the District and COMMERCE no reliable data are therefore available. The trade divides Powindah itself into two main heads-(a) the Powindah trade with trade. Afghánistán and (b) trade with Indian Districts, and districts in Baluchistán. Considerable transit trado between Afghánistán and India has passed through the District from a very early period by the Gomal, Záo, and Dahána Chúhar Khél passes and the passes between Kamr-ud-din Káréz. Késhatu, and Tirkhawar, and by the Domandi route. The amount and the character of this trade has thus been mentioned in the Gazetteer of the Déra Ismáil Khán District: "There are no very reliable statistics as to the extent of

COMMERCE AND TRADE.

the Powindah trade. The following figures are the best estimate obtainable of the principal articles of import and export, and of their annual value:—

Imports					Rs.
Fruits, drie	d and fr	esh	•••	•••	7,00,000
Madder	•••	***	•••	•••	6,00,000
Raw silk	***	•••	•••	•••	5,00,000
Wool	•••			•••	1,50,000
Charas	•••	•••	•••	•••	1,00,000
Horses		•••	•••	•••	65,000
Hing (Asa	foetida)	•••	•••	•••	50,000
Tobacco	•••	***	•••		30, 000
	T	otal In	ports.	Rs.	21,95,000
		Exports	3.		Rs.
Indigo	•••	•••			6,00,000
Manufactu	red cott	on go	ods (Eng-	
lish)	•••	•••	•••	**1	5,00,000
Manufactu	red cotto	n good	s (coun	try).	6,00,000
Tea	,	•••	•••	•••	1,00,000
Shoes and	leather	•••	***		40,000
Salt	•••	•••	•••	***	20,000
Sugar	•••		••	•••	20,000
Metal good	ls		•••	•••	20,000
Crockery a	and eartl	henwar	e	•••	° 7,000
	7	l'otal E	xp o rts.	Rs.	19,07,000

The centres of the Powindah trade in Khurásán are Bokhára, Kábul, Kandahár, and Ghazni. The following are the principal articles of merchandise brought from each:—

Bokhára.—Silk, charas, gold and silver thread (kalábatún) and furs.

Kúbul.—Pistachio nuts and fresh fruit of sorts, such as apples, grapes, etc.

Kandahár.—Almonds, pistachio nuts, raisins, dried fruits, and wool from the Kákar country. Ghazni.—Madder, wool, ghi, tobacco, and asafætida." * COMMERCE
The chief articles now imported from Afghánistán by the
Powindahs by routes other than the Gomal for which no
statistics are available are wool, fruits of sorts, and ghi,
while the exports to that country by these routes largely
consist of piece-goods (English and Indian), tea, and sugar.

The following table shows the principal items of the import and export trade between Afghánistán and Zhob, via Kamr-ud-dín Káréz during 1904-05:—

	Name o	of Article.	Quantity.	Value.		
					Maunds.	Rs.
Hi	ndubá	gh Tahsi	· .			
	Imp	orts.				
Wool	•••	•••	•••	••	+ 3,770	74,045
Raisins	•••	•••	•••	•••	5	50
Almonds	•••	•••	•••	•••	‡ 1,743	23,395
Hides	•••	•••	•••	•••	25 loads	3,500
Ghí	•	•••	•••		§ 1,557	84,560
Madder	•••	•••			10	100
Cumin see	d	•••	•••		85	350
•		Total	***		7,120 and 25 loads of hides.	1,86,000

^{*} Déra Ismáil Khan District Gazetteer (1888-84, pp. 142-48).

^{† 290} maunds taken to Quetta and rest for Karachi.

COMMERCE AND TRADE.

	Name	of Article	•		Quantity.	Value.
Hin		gh Tahsi oorts.	l.	,	Maunds.	Rs. o
Muslin, Ch	intz,	etc., clot	h	••	2471	12,29,900
Tea, green	•••	•••	•••	•••	2 ,124	2,18,289
Sugar	•••	•••	***	•••	770 1	6,178
Stationery	•••	•••	•••	•••	100	4,000
Misri tala	•••	•••	•••	•••	50 0	5,000
Crockery	•••	•••	•••	••	13 <u>1</u>	850
Dates	•••	•••	•••	•••	110	440
Oil, bitter	•••	•••	•••	•••	11	120
		Total	•••		3,876 1	14,59,227
Kila	Saif	ulla Tah	síl.			
	Imp	orts.				
Ghí	•••	•••	•••		11	349
Almonds	•••		•••		6]	107
Krut (drie	d cur	ds)	•••	•••	21	20
Raisins	•••	•••	•••	•••	• 1	7
Postins	•••	•••	•••		No. 35	468
Sheep	•••	•••	•••		No. 41	427
		Total	•••	•••	20½ 85 postins. 41 sheep.	1,378

No regular arrangements exist for the registration of this trade, and the figures given above which have been compiled from reports furnished by Levy clerks are not absolutely reliable.

Statistics of the trade going via the Gomal are not Commence available and no comparison can be made of the existing AND TRADE. state of things with those of the previous years. connection, the following comments made by Mr. Merk, late Commissioner of the Déraját, on the external trade of the Déra Ismáil Khán District for 1900-01 are noteworthy. He said: "No doubt the Gomal is the most direct route to Khurásán, but that and all other routes which gave access to Khurásán in the days when there was no railway to Chaman, when the Nushki route to Seistan was still undeveloped and before goods came to be sent via Batoum to Northern Khurásán are being slowly and surely abandoned by through traffic for the more modern lines. I take it that the trade now passing through the Tochi, Gomal, Chúhar-khél-Dahána pass, and via Khar simply represents the wants of the population living east of the line Khelát-i-Ghilzai to Ghazni, and that for purposes of commerce with the tracts and countries west of that line. these routes are and will remain in future useless."*

In 1901-02 the Commissioner of the Dérajat computed that during the Powindah migration some 50,000 souls and 150,000 animals traversed the Gomal pass. A large portion of the trade from Afghánistán finds its way to the North-West Frontier Province and the Punjab; part of it, however, comes to Zhob and the adjoining Districts of Quetta-Pishin, Loralai, and Sibi.

A rough estimate shows that the Hindubagh and Kila Local Trade. Suifulla tahsils import annually articles of the value of Imports. Rs. 20,000 and Rs. 26,000, respectively, the chief article imported being Indian and English piece-goods which Hindubágh consumes to the value of Rs. 15,000 and Kila Saifulla to that of Rs. 20,000. A small portion of the imports comes to Kila Saifulla from the Harnai railway station through Loralai, but the larger portion for that tahsil and

^{*} Report on the Esternal Land Trade of the Punjab for 1900-01 (Lahore : 1901), page 4.

COMMERCE Hindubágh comes from the Khánai railway station. The AND TRADE imports at this station in 1904 were as follows:—

Name of A	Quantity.			
European and I	ndian			Maunds.
piece-goods	•••		•••	6 33
Rice		•••		190
Gram and dál	•••	•••	•••	687
Gunny bags	•••	•••	•••	1,245
Kerosine oil	•••	•••	•••	74
Common oil	•••	•••	•••	40
Ghí	•••	•••	•••	30
Dry fruit	•••	•••	•••	160
Sugar	•••	•••	•••	224
Gur (molasses)		•••	•••	26 3
Tobacco		•••	•••	66
Miscellaneous				1,030

Fort Sandeman. bazar during 1904-05 were estimated as under:—

Name of A	rticle.		Quanti	y or Value.
Wheat flour an	ıd mai	da	1,230	maunds.
Wheat and oth	er gra	ins	47,840	"
Ghí	•••		1,000	"
Cloth	•••	1	,14,000	rupees.
Grocery	•••		4,000	"
Tobacco			450	maunds.
Molasses			1,340	**
Potatoes and or	nions		970	"
Soap	•••	•••	2,200	rupees.
Oil, bitter	•••	•••	150	maunds.
Leather		•••	7,600	rupees.
Iron	•••	•••	2,400	,,
Crockery, etc.	•••	•••	14,100	29
Fruit, fresh	***	•••	590	maunds.
Sugar	•••	P++	1,500	,,
Goats and she	вр	•••	1,958	number.
Wooden furnit	ure		1.650	rupees.

Fox skins are exported from Hindubagh and Kila COMMERCE Saifulla to Quetta: earth salt manufactured in the Kila Saifulla tahsil is exported to the neighbouring tahsils as fær as Sháhrig; and there is some trade in pistachio fruit. cumin seed, hyssop, and asafætida, and in chilahoza fruit which has been referred to under Forests. Other articles of export are not many and consist of-(a) sheep and goats, about 1,000 of which are exported to Bori and Quetta-Pishin annually; (b) camels, about 300 of which are annually bought by the Násars from Kila Saifulla: (c) wool, the value of the annual export of which is estimated at Rs. 60,000; (d) judri, wheat and barley which are in good years taken to adjoining districts in Afghánistán by nomads to the annual value of Rs. 11,000; and (e) ghi, about Rs. 3,000 worth of which is exported to Bori and Quetta-Pishin. Hindubágh also exports a small quantity of apricot stones and of the gum of the wild almond.

is largely dependent for its supplies on the Punjab by the Dahána Chúhar Khél route, while the Hindubágh and Kila Saifulla tahsils receive their supplies from Sind and the Punjab via Harnai and Khánai. Fruit is imported from Sukkur and Quetta. The Loralai District also supplies to a certain extent various kinds of grain. Tobacco is imported into Zhob from Afghánistán, Mastung, Sind, and Déra Ismáil Khán. The average annual exports by the Dahána Chúhar Khél pass during the five years ending with the 31st of March, 1905, amounted to 2,340 maunds and included almonds 563, asafætida 448, wool 602, hides and leathers 160, tobacco 210, chilghoza fruit 12, ghí 108, cumin seed 57. liquorice 2, dry fruits 18, madder 18, and miscellaneous 142. The imports amounted to 14,592 maunds and com-

prised grains 11,087, piece-goods 1,376, gur (molasses) 760, vegetables 234, sugar 185, kerosine oil 166, salt 185. wooden furniture, etc., 119, lime 109, metals and iron

Exports.

The trade of the District is chiefly with Sind, the North-Trade West Frontier Province and the Punjab. Fort Sandeman districts. COMMERCE AND TRADE.

articles 74, leather, boots and shoes 36, bitter oil 33, soap 20, earthenware 19, spices 13, acacia husk 8, fruits 4, tea 4, miscellaneous 210.

Classes ougaged in trade. The trade with Afghánistán is entirely in the hands of the Powindahs, while Hindu banias from the Déraját, Sind, and the Punjab largely command the local traffic. Besides the tahsíl headquarters and several levy posts, important villages in the District such as Murgha Mehtarzai, Kán Mehtarzai, Kamchughai, Murgha Kibzai, and Mína Bázár have shops where the banias retail the goods and buy such articles as are available for export. The transport is almost entirely supplied by the Ghilzais from Afghánistán.

Octroi, etc.

Octroi is levied at Fort Sandeman and Hindubagh, a reference to which is made in Chapter III. The Fort Sandeman bazar has a panchait of the Hindu trading community, which has three chaudris, representing the interests of Sindhi, Déra Ismáil Khán, and Vihowa banjas. They act as spokesmen for their comrespectively. munities, assist Government officials in collecting bazar taxes, in arranging supplies for Government purposes and in the general management of the bazar. They also manage the vancháit fund. This fund is maintained by fees levied on daláls or brokers and is expended on charitable purposes. The panchait has also to maintain shops at Lakaband, Bádinzai, Máníkhwa, Bábar, Dahána Chúbar Khél, Brunj, and Shinghar, Rs. 42 per month being paid by Government towards the wages to the men in charge of these shops and the balance by the pancháit fund.

Daláls.

The privilege of acting as daid or broker in the Fort Sandeman bazar is sold each year by auction by the panchdit, the average annual income being Rs. 1,140. The business of the daid consists mainly in arranging sales and purchases for foreign traders, chiefly these from Afghan territory.

They kevy the following fees from both the seller and COMMERCE buyer :-

Artioles.	Fees from Sellers,	Fees from Buyers.
Grain of sorts.	6 pies per maund in cash, and 4 chittacks of grain per maund.	3 pies per maund.
Ghí	4 annas per maund.	1 anna per maund.
Almonds	2 " " "	1 ,, ,,
Wool	2 ,, ,, ,,	1 ,, ,, ,,
Rice, salt, molasses, and sugar		6 pies ,, ,,

Transactions among the shopkeepers themselves or among the shopkeepers and local men are also liable to brokerage, provided the article disposed of is more than a sackful in quantity and in case of ghi and oil more than a canister. In such transactions both the buyer and the seller have to pay 14 pies per maund on grains, 6 pies per maund on ghi, and wool, and S pies per maund on rice, sugar, molasses, and salt.

In the case of foreign traders the transactions carry a responsibility on the part of daláls to collect amounts due to them from the different purchasers. The traders are also provided with lodging and given every other reasonable help in return for the higher rates of brokerage charged them.

The survey for a line of railway from Khajuri Kach MEANS OF GOMMUNICAin the north-east corner of the District, through the Zhob valley to Khánai on the Sind-Pishín section of the North-Western Railway was carried out under the direction of Major (now Colonel) B. Scott, C. I. E., R. E., Engineer-in-Chief, during October, 1890, to March, 1891; plans and estimates were prepared, but the construction of the line has

TION. Railways. MEANS OF COMMUNICATION.

or not yet (1906) been sanctioned. One of the principal objects of this scheme was to provide a short route to the Déraját and the Punjab and an alternative line to the Sind-Pishín and Bolán lines in case one or both of these lines were rendered impassable. Breaches of these lines are always liable to occur in the rains, and the Sind-Pishín and Bolán lines being in close proximity to each other, the local rainfall would affect both lines at the same time.

Harnai and Khánai are the two railway stations on the Sind-Pishín section of the North-Western Railway which serve the Zhob District, the former being 168 miles from Fort Sandeman by Loralai and Murgha Kibzai, and the latter 171½ miles by Murgha Mehtarzai, Hindubágh, and Kila Saifulla. But people wishing to go from Fort Sandeman to the Punjab often use the Dahána Chúhar Khél road to Déra Ismáil Khán (distance from Fort Sandeman about 115 miles) the nearest railway station being Darya Khán on the Sind-Saugar section of the North-Western Railway, 149 miles from Multán City and 356 miles from Lahore.

Roads.

The south and north-eastern parts of the District are well provided with made roads, but such is not the case with the north-western portion. The details of the principal routes in the District are shown in table IX, Volume B, and table X, Volume B, contains a list of the Dák Bungalows and Rest Houses.

Harnai-Loralai-Khajúri-Kach road, The principal route is that which leads from Harnai to Fort Sandeman, via Loralai, with its extension to Khajúri Kach and thence to Déra Ismáíl Khán. The total distance from Harnai to Déra Ismáíl Khán is 324 miles which is divided into four sections: (1) the Harnai-Loralai section (55½ miles); (2) the Loralai-Murgha Kibzai section (55½ miles); (3) the Murgha-Khajúri Kach section (124 miles); and (4) the Khujúri Kach-Déra Ismáíl Khán section (86 miles). The first 22 miles (Harnai to the Ushghára Kotal) of the Harnai-Loralai section, which runs through the Mehráb Tangi and the Dilkúna defile lie in the Sibi District,

and thence to Loralai (331 miles) in the Loralai District MEANS OF The route then traverses the Pishin-Déra Gházi Khán road for 133 miles (Loralai to Shabozai 1673 miles from Déra Ghazi Khan) and thence begins the section to Murgha (443 miles) of which 294 miles to Zara lie in the Loralai Districtand the remaining 151 miles in the Zhob District. distance from Murgha Kibzai (where there is a military post) to Fort Sandeman by Lakaband and Bábar is 54 miles, the greater portion of the first 211 miles (to Lakaband) runs through hills. From Fort Sandeman the road generally follows the bed of the Zhob river and runs in a northeasterly direction to Kuchbina (561 miles). About 8 miles further on towards Khajúri Kach it enters the Déra Ismáil Khán District of the North-West Frontier Province: Khajúri Kach being 133 miles from Kuchbina, the distance from Khajúri Kach to Déra Ismáil Khán being about 86 miles The first section was made immediately after the occupation of the Bori valley in 1887 and was subsequently metalled, improved, and made fit for wheeled traffic; its cost was Rs. 10,600 per mile and the maintenance charges (in 1905) Rs. 505 per mile. The line was extended to Mír Ali Khél (1471 miles from Loralai, and 35 miles beyond Fort Sandeman) in 1890-91 and to Khajúri Kach (35 miles) in 1891-92. The cost of the Murgha-Khajúri Kach section was Rs. 2,499 per mile, and its maintenance charges (1905) Rs. 92 per mile.

This road which continues through to Déra Ismáil Khán, the Fort Sandeman-Chuhar (approximately 115 miles) and is the main communication Kh i Dahana between Zhob and the Punjab, has a length of 471 miles. road. It is cut by the Punjab boundary at Katao Dabara in the middle of the Dahána pass.

The road was first made in 1894-95 and further improvements carried out year by year from 1898 to 1905, the total expenditure apart from minor maintenance items

^{*} A sum of Rs. 50,000 has been allotted (1906-07) to improve the road between Loralai and Fort Sandeman. 27 M

MEANS OF COMMUNICA-TION. being Rs. 2,41,944. Of this total, Rs. 1,24,000 or practically half were spent in the Dahána Tangi where the narrow gorge with its precipitous sides necessitated continuous blasting along the rocky slopes to obtain a road of permanent character.

After rain the road is liable to be blocked with boulders and débris, but in its normal state it forms a good and safe route for camels and in parts can be used by wheeled traffic.

For the first 8 miles from Fort Sandeman it follows the Fort Sandeman-Loralai road as far as Kapíp, and then branches off to the cast. At Máníkhwa, 24 miles from Fort Sandeman, there is a rest house and another at Dahána Sar, 20½ miles from Máníkhwa. The Dahána pass is entered shortly after leaving Dahána Sar rest house and continues for about 7 miles before it debouches into more open country. The Baluchistán boundary however cuts the road 3 miles beyond Dahána Sar and the rest of the road which has an average breadth of 12 feet to Déra Ismáil Khán is under the control of the North-West Frontier Government.

Fort Sandeman-Músa-Khél road. A bridle path runs from Fort Sandeman to Músa Khél tashil of the Loralai District by Kapip, Atal Kach, and Toi Sar, the total distance of which is 58 miles, and thence to Khán Muhammad Kot 19 miles. Toi Sar is also connected by a path with Dahána Sar, 29 miles.

Khánai-Fort Sandeman road. The Khánai-Fort Sandeman road branches off from Khánai railway station in the Quetta-Pishín District and traverses upper and central Zhob. The total distance is 1.71½ miles, of which about 22 miles (Khánai to Mehtarzai Tsarai) lie in the Quetta-Pishín District. The principal stages on the road are Khánozai (15 miles), Hindubágh (30 miles), Kila Saifulla (38½ miles), Musáfirpur (55½ miles), Bádinzai (17½ miles), and Fort Sandeman (15½ miles). From Khánai to Hindubágh the cost was Rs. 3,570 per mile and

beyond that stage to Fort Sandeman Rs. 694 per mile, the MEANS OF maintenance charges varying from Rs. 11 to Rs. 19 per COMMUNICATION. mile (1905).

Other important routes are—(1) from Hindubagh to Other routes. Chinjan in the Loralai District (28 miles), and Hindubágh to Murgha Fakírzai (25 miles), and Bábu Chína (25 miles): (2) and thence to Loiband, Késhatu, and Kamr-ud-din Káréz; (3) from Akhtargai (9 miles from Kila Saifulla) to Loralai via the Dholu pass (28 miles); (4) from Gwál Haidarzai (33 miles from Kila Saifulla) to Loralai (39 miles); (5) from Fort Sandeman to Kuria Wasta (32 miles) by Bahlol and Urjas Sar; (6) from Fort Sandeman to Shin-ghar (30 miles); (7) from Fort Sandeman to Gul Kach via Walla Nawe Obe and Girdao (511 miles); (8) from Nawe Obo to Husain Nika shrine (about 35 miles), and from Mír Ali Khél to the same shrine (26 miles); (9) from Murgha Kibzai to Músa Khél (30 miles); (10) from Murgha Kibzai to Mékhtar on the Pishin-Déra Gházi Khán road (20 miles); and (11) the Kákar Khurásán route from Fort Sandeman to Kamr-ud-dín Káréz (c-127 miles) which is shown in detail in table IX, Volume B.

The Gomal route used by the Ghilzai Powindahs from Trade router. Afghánistán lies on the border of the Zhob District. Other main routes by which the Powindahs travel on their periodical migrations are—(1) from Késhatu to Tirkhawar (21 miles), Ghazlúna (c-16 miles), Loiband (c-18 miles) and thence to Sábúra and Yárú Káréz in the Quetta-Pishín District, and from Loiband to Shemli Nika, Murgha Fakírzai and Hindubágh; (2) Késhatu to Mughal Cháh about 25 miles, whence three paths lead to the Zhob valley-(a) the Sraghurg Liar by Tarwa Murgha to Murgha Fakirzai (30 miles); (b) by Lunda Liar to Kazha Tangi (51 miles), and (c) by the Loe Liar to Kila Saifulla (58 miles) via Sanzala. Churga, Barat Siaza and Khasnob; and (3) from Kamr-uddín Káréz to Tánishpa and thence either to Kila Saifulla (97 miles) by Rod Jogizai, or to Fort Sandeman by Shighala.

MEANS OF The annexed table shows the road mileage on March 31, COMMUNICA- 1905:—

	i	MAINTAINED FROM PROVINCIAL REVENUES.			
Description,	Т.	In charge of Military Officers.	In charge of Revenue Officers.		
Total roads and paths	793	616	177		
Cart roads, partially metalled and bridged		15	25		
Unmetalled, fair wea- ther roads and bridle paths.		601	152		

Besides these 6 miles of roads are kept up by local funds in Fort Sandeman.

Transport.

Camels are the principal means of transport throughout the District. The number of these animals possessed by the permanent inhabitants is estimated at about 3,600, while about 12,000 are computed as belonging to nomads, chiefly the Ghilzai Powindahs. These Powindahs have also about 3,000 donkeys and 800 oxen.

The carrying trade is largely in the hands of Ghilzais, the chief sections engaged in the trade being the Niamat Khél, Bhar Khél, Jalál Khél, Ush Khél, and Masézai Násars and the Mala Khéls. The indigenous camels used in transport are those belonging to the Ghorézai Sanzar Khéls of Kila Saifulla. Next to camels come donkeys and oxen. The Haripáls and Shíránis largely use donkeys when they go to Afghánistán and Chágai to collect asafætida. Donkeys are also employed by labourers in carrying building material such as earth, lime, bricks, etc. Bullocks

are used by the local Afghans for transport of household Means of articles for short distances.

TION.

The rates of hire vary according to supply and demand, and are usually fixed by private arrangement between the traders and carriers. The rates are cheaper in winter when there is a large number of Ghilzai camels in the District. The usual rates between important places are as follows :-

From	То					Rate Per Camel.		
Fort Sandeman	Loeband	and	vice	ve	rsa	Rs.	a. 0	p. 0
,,	Tirkhawar	"	,,	,,	·•.	11	0	0
,,	Késhatu	,,	,,	,,	•••	9	0	0
,,	Hindubágh	19	,,	,,		8	8	0
,,	Kila Saifulla	,,	,,	,,		6	0	0
,,	Déra Ismáíl Khán	,,	,,	,و		7	0	0
Déra Ismáil Kháu.	Fort Sande- man	,,	"	,,		6	0	0
Fort Sandeman	Bori	,,	,,	,,		6	0	0
,,	Harnai	,,	,,	,,		8	0	0
"	Kamr-ud-dín Káréz	,,	"	,,		7	0	0
,,	Sra Darga	"	"	,,	•••	5	0	0
₃₁ · · ·	Mír Ali Khél	۰,,	,,	,,		2	12	0
,,	Mughal Kot	1)	,,	,,		4	0	0
)) to.	Gustoi	"	,,	,,		4	0	0

MEANS OF
COMMUNICA-
TION.

From		To					Rate Per Camel.		
					ı (R	3. a _r	р.
Fort Sandeman		Gul Kach	and a	ice	vei	rsa.	4	0	0
21		Shin Bázhai	,,	19	29		2	12	0
,,		Girdáo	,,	"	,,		2	12	0
"	•••	Husain Nike	٠,,	·))	,,		3	12	0
**	•••	Músa Khél	,,	,,	31		4	8	0
,,	•••	Shín-ghar	"	"	,,		3	8	v
»	•••	Sharghali	, ,,	"	,,	•••	3	8	0
"	••.	Máníkhwa	,,	,,	,,	•••	1	12	0
Loeband		Yáru Káréz	,,	,,	"		6	0	0

The traders at Harnai ordinarily pay R. 1-2-0 to Rs. 2 per maund on merchandise despatched to Fort Sandeman, and the rate of hire per maund from Khánai to Hindubágh is about As. 8.

Cam el contracta.

The question of camel transport has always presented much difficulty and conferences and committees were held in 1884, 1887, 1890, and 1891 to consider the subject. The conference which assembled in September, 1891, under the presidency of Mr. (now Sir Hugh) Barnes, the then Revenue Commissioner in Baluchistán, drew up an elaborate set of rules and a draft agreement, the terms of which were approved by the Government of India. This conference recommended the division of the whole Baluchistán Agency into two independent circles, the contract in each circle being held by a single contractor. The second circle included the Sibi, Loralai, and Zhob Districts for which a contract was concluded for a period of three years—ending

with the 30th of September, 1894. On the termination of this Means of contract a conference again assembled under the presidency of Major MacIvor, in November, 1894, when it was decided that though for the rest of Baluchistan the supply of camel carriage and the rates to be paid might be left to the ordinary laws of supply and demand, it was desirable to retain the existing arrangements in the Zhob, Sibi, and Loralai Districts; and the contract system with certain modifications still remains in force (1905).

COMMUNICA-TION.

The Military Works Services and the Supply and Transport Department have separate contracts.

The District is well provided with telegraphs, all Telegraph. headquarter stations and important points being connected offices. by wire. There are telegraph offices at Murgha Kibzai (opened in October, 1889), Fort Sandeman (April, 1890). Mír Ali Khél (December, 1890), Mughal Kot (August, 1894), Hindubágh (February, 1896), Girdáo, Gul Kach (August, 1898), Kila Saifulla (March, 1899), Loeband and Kamrud-din Karéz (December, 1905). The extensions of the telegraph line from Girdao to Husain Nika and from Fort Sandeman to Shin-ghar have been sanctioned (1906), and it has also been decided to establish, as an experimental measure, telephonic communication between the Zhob Levy Corps posts of Gustoi, Sra Darga, and Husain Nika.

All the telegraph Offices mentioned above are depart- Post offices. mental combined post offices, Fort Sandeman being a sub-office while the remainder are branch offices. They issue and pay money orders and are authorised to transact savings bank business. Parcels are carried between Harnai and Loralai by the mail tongas daily and between Loralai and Fort Sandeman twelve times a month from both directions by camels : a camel load is not to exceed 21 maunds and the journey ordinarily occupies four days.

Mails are also carried between Harnai and Loralai by tonga service, the contract for which is renewed annually under the orders of the Political Agent, Loralai. The MRANS OF COMMUNICA-TION

up journey takes about eleven hours and the down journey nine hours. Between Loralai and Fort Sandeman the mails are carried by Postal Levy sowars, via Gwál Haidarzai whence there is a daily service to Kila Saifulla (33 miles) and Hindubágh (71½ miles). Sowars also carry the mails between Mékhtar (on the Loralai-Kingri-Fort Munro line (47¾ miles from Loralai) to Murgha Kibzai post (20 miles) every alternate day. Between Fort Sandeman and Mír Ali Khél (35¼ miles) the mails are carried by sowars and from Mír Ali Khél to Gul Kach (22 miles) by footmen, the former service being thrice, and the latter twice a week. From Mír Ali Khél to Mughal Kot (14¼ miles) sowars carry the dák twice a week.

The total strength of levies employed on postal lines was

* Duffadars 9 (in March, 1906) 53*

Munshi 1

Sowars 43 and the total cost in

1905-06 Rs. 13.207-12-0.

FAMINE. Scarcity and its causes

The Hindubágh and Fort Sandeman tahsíls have large portions of their areas permanently irrigated, but the sources of irrigation are much affected by rain and snowfall. and in years of light rainfall their irrigating capacity is largely reduced. A considerable area of land in the Kila Saifulla tabell is, however, entirely dependent for cultivation on rain, while flockowners in all tahsils also look to rain for their supply of pasture. The primary cause of scarcity. therefore, is the failure of the autumn and winter rains and if such failures continue for two or three years, the scarcity will intensify and even famine may result. Failures of the crops in Sind, the Déraját, and the Punjab also affect the prices of staples in the District. Flockowners not infrequently suffer heavy losses by the mortality among their animals due to severe cold in winter.

Besides drought the other causes tending to scarcity in the District are ravages by locusts, disease in the crops, floods, hailstones, and severe cold.

Of the two harvests, the rabi is the more important. Famine. but the failure of either of the two causes hardship among the people. A combined failure of both crops and grazing for consecutive seasons greatly intensifies scarcity.

There is no record of famines before the British occu- History of periods of protective messures.

nation but the District, and especially its central portion, searcity and is subject to frequent drought and scarcity. The period between 1897 and 1905 was one of deficient rainfall, especially during 1899-1900 when there was a large exodus to Afghánistán. Produce revenue adjusts itself to variations, and suspensions and remissions of it are rarely necessary. In 1899-1900 land revenue to the amount of Rs. 171 and grazing tax to the amount of Rs. 11,784 were suspended chiefly in the Hindubágh and Kila Saifulla tabells. During this period of distress advances to the amount of Rs. 50,115 were granted under the Land Improvement Loans Act and Rs. 31,478 under the Agriculturists' Loans Act. Prices rose very high during this period. In Fort Sandeman the rate of wheat rose to 6 seers for a rapee during a part of the year 1900. In 1899 wheat at Kila Saifulla was sold at from 7 to 83 seers per rupee. In Hindubágh juári was selling from 6 to 7 seers to a rupee in 1902-03 and wheat was scarce even at this high rate. To afford help to the people in distress, relief works were opened, chiefly on roads at a cost of Rs. 6,048 in 1899-1900 and Rs. 48,823 in 1900-01, the funds being provided from Imperial grants. Besides these, the Toiwar irrigation scheme was also taken in hand as a relief work. and a sum of Rs. 2,303 expended on preliminaries, but owing to disputes regarding land to be irrigated the scheme was abandoned. A sum of Rs. 6,000 was also spent from Provincial Revenues on the construction of two bridle-paths running through the tracts in Central Zhob where the effects of the drought were most severely felt. 28 M

FAMINE.

Major F. Macdonald, Political Agent of the District, writing about the scarcity of 1899-1900 reported as follows:—

"The year was one of general and in many places of great scarcity. For three years past the rainfall has been very small, and during the last year it was less than it was ever before. The snow which fell in January, was not sufficient to make any difference to agriculture or grazing prospects except in Hindubágh and in parts of Kákar Khurásán where the fall was good. The result of all this was a drought, which was felt more or less all over the Even those places which are blest with a perdistrict. manent water supply were affected, the springs and kúrézes diminishing in quantity and in some places actually drying up, while khushkaba lands were, practically speaking, not sown at all. The upper part of Hindubagh and that part of Fort Sandeman which is cultivated from cuttings from the Zhob river, were not so badly off, but in Central Zhob, where the khushkaba harvest is usually very fine and in parts of Fort Sandeman, the distress was very considerable.

"Perhaps the greatest evil was the want of grazing, the tribes in Central Zhob having especially lost very heavily. Other causes also contributed towards the heavy losses in cattle, e.g., the diseases which broke out among the flocks and a violent hailstorm at Murgha Kibzai which is said to have killed 1,200 sheep and over 100 head of cattle. In Central Zhob an extremely cold and violent wind blew for several days, damaging crops, covering them with a heavy layer of sand and earth and filling up kárézes so as to render them almost useless until cleaned and repaired. In the beginning of 1900-01 a hailstorm of extraordinary violence entirely destroyed the crops at Murgha Kibzai."

The assessment of cattle tax in Fort Sandeman for the year 1901-02 was suspended till the spring of 1902-03, owing to the absence of owners. The year 1902-03 was also one

of scanty rainfall, especially in the Hindubagh and Kila FAMINE. Saifulla tahsils. Cold was very intense during 1903-04 in Khurásán, thousands of sheep being killed by the severe weather. In the Hindubagh tahsil in the beginning of the year 1904 there was scarcity of fodder and a disease called pun combined to cause great loss among the herds. Khushkába cultivation failed more or less in all the tahsíls of the District owing to want of rain, and a hailstorm destroyed most of the rice crop of Safi Kot in the Fort Sandeman tahsíl. The year 1905-06 was again a dry year. Khushkába failed altogether in Kila Saifulla. Revenue to the extent of Rs. 1.326 was remitted in this tahsil and advances of about Rs. 5,000 were granted for purchase of seed grain and plough oxen for use in irrigated and dry

The greatest safeguard against drought and famine, however, consists in the migratory habits of the people who go to the Quetta-Pishin, Loralai, and Sibi Districts in Baluchistán, to the Dámán in Déra Ismáil Khán or to Afghánistán wherever they can find pasturage for their animals, and food for themselves.

areas.

The Fort Sandeman tahsil has had several visitations Visitations of locusts. In 1892 swarms of locusts damaged the wheat of locusts. and melon crops; in 1894 the melon and other autumn crops were affected, and in 1900 fruit-bearing trees and the kharif and melon crops were again severely damaged. In the Government garden at Fort Sandeman, the trunks of trees were covered with paper, but this method of protection proved of no avail. Again in 1901 much damage was done by locusts to vegetables, pálézát and fruit trees in the District.

Lands situated on the Zhob river are subject to floods in the rainy season, for instance a portion of the cultivation was washed away when the river came down in flood in May, 1901, after a record rainfall. In Hindubágh, during years of excessive rainfall, the Kamchughai and Rod

Floods.

Famine. Fakírzai torrents sometimes damage the Urgas and Kazha lands, respectively.

Rust. Rust which is said to be due to excessive rain in spring sometimes affects the wheat crop, but severe damage from this cause has not yet been reported in any tahsil. An east wind is said to cause it to appear in the crops while the west wind is believed to remove it.

CHAPTER III. - ADMINISTRATIVE.

Previous to the formation of the Loralai District, the ADMINISTRA-Zhob District was divided into two sub-divisions, Upper and Lower Zhob. The former comprised the Bori, Hindubagh and Kila Saifulla tahsils and the latter the Fort Sandeman and Músa Khél tahsíls. As already mentioned, the Músa Khél and Bori tahsíls were, in October, 1903, transferred to the new Loralai District, and the Zhob District was divided into three sub-divisions, namely—(1) the Upper Zhob sub-division consisting of the Hindubagh and Kila Saifulla tahsíls; (2) the Lower Zhob sub-division consisting of the Mando Khél and Sbíráni countries, the Sulaimán Khéls and the Khurásán tracts along the Kundar river; and (3) the Fort Sandeman sub-division consisting of the Fort Sandeman tahsil. In actual practice, however, the Lower Zhob and the Fort Sandeman sub-divisions are managed as a combined unit. The ordinary head-quarter staff consists of a Political Agent, an Assistant Political Agent, an Extra Assistant Commissioner in charge of the Fort Sandeman and Lower Zhob sub-divisions. An Honorary Assistant District Superintendent of Police temporarily deputed from the Sibi District is in joint charge of the Police force in the Zhob and the Loralai Districts with head-quarters at Fort Sandeman. An Extra Assistant Commissioner holds charge of the Upper Zhob sub-division with head-quarters at Hindubágh.

In each of the tahsils of Kila Saifulla and Hinduhagh a tahsíldár and a náib tahsíldár are stationed, while at Fort Sandeman the tahsildar has two naib tahsildars. Their principal duty is the collection of Government revenue but they also exercise judicial powers. The officers in charge of the Upper and Lower Zhob sub-divisions supervise collection of revenue, occasionally attend in person to batái and tashkhis work, and, in subordination to the Political

TION AND STAFF.

TION AND STAFF.

ADMINISTRA- Agent, control the tribes within their limits. They also exercise judicial powers. The subordinate staff consists of Muhasibs, Kanungos and Patwaris who are paid servants of Government, and village headmen, known locally as malike or lambardars. The latter help in the collection of revenue and are remunerated by payment of 5 per cent. on the gross collections (haq-i-malikána). The strength of the revenue staff (1905) is shown below:-

Tabsils.	No. of Circles.	Kánúngos and Muhásibs.	Patwáris.	Headmen.	
Hindubágh	7	4	7	165	
Kila Saifulla	3	3	4.	128	
Fort Sandeman.	. 5	2	6	209	
Total	15	9	17	502	

JUDICIAL. Special Laws.

The Baluchistán Laws Law, the Forest Law, and the Civil Justice and Criminal Justice Laws were enacted in 1890 and applied to the District; the last two were modified in 1893 and re-enacted in 1896. The circumstances of the District have not, so far, necessitated the enectment of any special laws for it. The whole of the Public Gambling Act III of 1867 has been applied (1894) to the Civil and Military stations and native town at Fort Sandeman. Indian Arms Act, 1878, with the exception of certain sections prohibiting the carrying and possession of arms without a license was applied to the District in 1895, and of the excepted portions, Sections 13, 14 and the last 26 words of Section 15 were applied in 1904 to the Civil and Military stations and the native town at Fort Sandeman, the Civil station and bazar at Hindubágh, and the Civil and Military station at Kila Saifulla.

Legal practitioners are not permitted to practice in the JUDICIAL. courts generally, but a pleader may appear in a court in any particular case, whether civil or criminal, with the permission of the Agent to the Governor-General. Petition-writers are of two grades and their appointment is regulated by rules issued by the Judicial Commissioner in 1899. On the 31st of March, 1905, there were two first grade and four second grade petition-writers.

The Political Agent combines the offices of Magistrate of Administrathe First Class, District Magistrate and Sessions Judge, and and Criminal is a Justice of the Peace. In respect of Civil Justice. he Justice. possesses jurisdiction to try original suits without limit as regards value. A decree or order made by him in an original suit of value not exceeding Rs. 500. and in an appellate suit, the value of which does not exceed Rs. 1,000 is final, and subject only to revision. In criminal trials no appeal lies in cases in which he passes a sentence of imprisonment for a term not exceeding one year, or of fine not exceeding Rs. 1,000. or of whipping, or of all or any of these punishments combined. The Political Agent is also a Registrar of Births, Deaths, and Marriages. The following table shows the subordinate courts (1905): their ordinary powers and the courts to which appeals lie:-

Courts.	Powers in Civil Suits.	Powers in Criminal Cases.	which Appeal lies.	REMARKS.
ant Political Agent, Zhob.	Powers to hear appeals from or- ders of Tahsildárs, and Náib Tahsil- dárs throughout		Agent, Zhob. Bevision to High Court.	Notes. A decree or order made in an original suit of value not exceeding Bs. 50 by a Tabsildár or not exceeding Bs. 100 made by Assistant Political Agent or Extra Assistant Commissioner is final but is subject to revision.

JUDICIAL.

								
4.	Courts.	Powers in C	[iviC	Powers	in Cr	iminal	Court to	Dani pre
	COULDE	Suits.			2368.		which Appeal lies.	BEMARKS.
							1 11049	
	(3) Extra	Rs. 10,0	000.	First (lass I	lagis-	Political	(2) No appeal
	Assis tant	Appeals f	rom	trate. 5	um m	ary	Agant Thah	lies in a crimi-
	Commis-	GACIBIOHA	auu	DOMEDS.	DUL	J-Q1V1-	Kevision to	nal case in which
	wer Zhob.	orders of Tab	1911-	y nuce ja	from	ded.	High Court.	a Magistrate of
	WEL ZHOD,	Tahsíldárs		sions of				the First Class passess sentence
		the Lower Z						of imprisonment
		Sub-division	١.	trates in		Z hob		for a term not
		77- 10/		Sub-divi			_	exceeding six
	(8) Extra	Rs. 10,0	000.	First C tate. S			Do.	months only or
	Assistant Commis-	decisions		powers.		-livi-		of fine not ex-
	sioner. Up-	orders of Tal	h-fl-	gional		trate.		ceeding Rs. 500 only or of whip-
	per Zhob.	dárs and N	laib	Appeals	from	deci-		ping only.
		Tahsiklárs		sions of				
		the Upper Z Sub-division		Second C gistrates		Ma- Opper		(3) The Extra
		Can-Graraton		gistrates Zhob Sul				Assistant Com-
	(4) Tahsil-	Rs. 800		Second			The Extra	missioners. Lower and
	dár, Hindu-			gistrate.				Upper Zhob,
	bágh.		- 1					exerciso juris-
								diction in origi-
							Class Magis-	nal civil suits,
				1			Zhob.	throughout the whole District.
	(5) Tahsil-	Rs. 300			Do.		Do.	WHOIG DIBRICO.
	dár. Kila							
	Saifulla.	D 800			Do.			
	(6) Tahsil-	Rs. 300	•••		D0.		Assistant	
	dár, Fort Sandeman.						Political Agentor Ex-	
							tra Assistant	
							Commission-	
							er, Lower	
	/m> >=/!	II. to Da E	20	Third	Clas	в Ма-	Zhob.	
	(7) Náib Tahsiidár.	Up to Ra. 5	,u	gistrate.	Cias	e Mr.	The Extra Assistant	
	Hindubágb			824			Commissioner	
							and First	
							Class Magis-	
							trate, Upper	
	(8) Náib	,, ,, 5	io		Do.		Zhob. Do.	
	Tahsild á r	""					200	
	Kila Bai-							
	fulla.	_						
	(9) lst Náib		50		Do.		The Assist-	
	Tahsil d á r, Fort Sande-						ant Political Agent or the	
	man.						Extra As-	
							sistant Com-	
							m is sioner,	
	(A) A		.		ъ.		Lower Zhob.	·
	(9) 2 n d Náib Tah-	,, ,, 0	60		Do.		Do.	
	sildár, Fort		1					
	Sandeman.							

Under Section 2 of the Frontier Crimes Regulation certain JUDICIAL. powers specified in Part I, clause b (i) to (v) of the first powers of the schedule to that Regulation have been conferred upon Extra Extra Assist-Assistant Commissioners in charge of Upper and Lower Sub-divisions. These include, among others, the power to appoint members of a jirga and to refer cases to them and to take security for good behaviour or for keeping the peace for a period not exceeding three years. They have also been permitted to accept a compromise or to allow the plaintiff to withdraw a civil or revenue case when the amount does not exceed Rs. 500, the Tahsildar exercising similar powers in cases the value in which does not exceed Rs. 100.

sioners and tahaildárs.

Table XI, Volume B, gives details of civil suits disposed Civil Justice. of by various courts in the old Zhob District from 1893-94 to 1902-03 and for the new District for 1903-04 and 1904-05. In the quinquennial period 1893-94 to 1897-98, the average annual number decided was 659 of which 482 were original. 7 appellate, and 170 cases for execution of decree : during the quinquennial period ending with the 31st of March. 1903, the annual average fell to 426. In 1903-04, when the Bori and Músa Khél tahsíls were transferred to Loralai, the number of cases decided in the remaining 3 tahsíls was 253. and in 1904-05, 222 of which 142 were original, 4 appellate. and 76 cases of execution of decree. The majority of these civil suits occur in the town of Fort Sandeman, most of the parties being aliens from India engaged in trade and labour. Suits among the indigenous population are generally tried politically. Of the total number of 142 original suits in 1904-05, 124 or 87 per cent. were disposed of in the Fort. Sandeman tahsil. The majority of the civil suits instituted are for money and moveable property. The petty nature of the suits may be judged from the fact that in 1904-05, 133 out of a total of 142 original suits were disposed of by Tahsíldárs' and Náib Tahsíldárs' courts. Appeals are filed only in a few cases. In the old Zhob District there were

JUDICIAL.

29 appeals filed during three years, 1900-01 to 1902-03, and in 22 cases the decision of the Lower Court was upheld; in 1904-05, there was only one appeal in the new District, which was rejected. In the three years 1900-01 to 1902-03, 179 applications for execution of decrees were filed, of which 64 proved infructuous either owing to the judgment debtors' inability to pay the amounts decreed against them or to the decree holders failing to appear and prosecute their cases.

Criminal Instice.

Criminal cases in which people of India are involved are dealt with judicially, while cases against the indigenous population are, as a rule, tried politically with the help of irgas. Details of the criminal cases disposed of during the decennial period ending with the 31st of March, 1903, in the old Zhob District, and during 1903-04 and 1904-05, in the new District, are given in table XII, Volume B. The annual average during the quinquennial period 1893-94 to 1897-98, was 165 of which 160 were original and 5 appellate. In the second quinquennial period the annual average fell to 90 of which 85 were original and 5 appellate. In 1903-04 and 1904-5, the total number of cases disposed of was 88 and 60, respectively, of the latter 57 were original and 3 appellate. The petty nature of the crime thus dealt with is indicated by the fact that 99 per cent. of the average number of original cases disposed of during the second quinquennial period were decided by courts subordinate to the District court and in 1904-05, out of 57 original cases 58 were disposed of by these courts. The Political Agent remarks "that in the new District during the period of three years ending with March 31, 1903, the total number of cases disposed of was 107, of which 7 fell under offences against the State, public tranquillity and human life, 18 under offences against the person, 24 under offences against property, 3 under gambling, while 55 were miscellaneous petty offences.

"The percentage of convictions obtained was 94.5. In the remaining cases the failure to obtain convictions was due to insufficient proof. The number of appeals filed JUDICIAL. against the orders of the subordinate courts during the same period was 14 and their orders were upheld in 11 cases by the appellate courts." In 1903-04 and 1904-05 there were 4 and 3 appeals, respectively.

The system of the disposal of disputes of all sorts by the Jirga cases. elders of villages or tribes is indigenous to the country: the procedure is simple and has many advantages. It has been regularised from time to time by certain special regulations. the latest being the Frontier Crimes Regulation III of 1901, which has been applied to the Agency territories with certain modifications. The system possesses special advantages when worked in conjunction with the Levy system, under which crime in the areas outside the towns is investigated by the headmen and levies. At the same time it requires continuous supervision by the District Officers to prevent abuses such as spring from ignorance and partiality.

Ordinary cases are referred to a council of elders of not less than 3 members selected from among headmen of villages, and leading men of tribes, and occasionally from the native officers of the Zhob Levy Corps, whilst those which involve any question of principle or affect two or more important tribes or two Districts, are generally referred to the shahi jirgas, which assemble at Quetta and Fort Munro in the autumn and at Sibi in the winter. It is the function of the jirga to come to a finding of fact on the issues placed before them, and its award is then submitted to the Political Agent, with whom alone lies the power of passing final orders in the case, and of determining and awarding punishment under the Regulation. Ordinarily the Political Agent may sentence an offender to seven years' rigorous imprisonment: a sentence exceeding this term, up to a maximum of 14 years, must be confirmed by the Agent to the Governor-General. No appeal lies from awards passed by the Political Agent, but his orders are subject to revision by the Agent to the Governor-General.

JUDICIAL.

Details of the cases disposed of by jirgas during 1893-94 to 1904-05 are given in table XIII, Volume B. The annual average number of cases decided in the two quinquennial periods from 1898-94 to 1897-98 and from 1898-99 to 1902-03 in the old District, was 2,109 and 1,330, respectively, while in 1904-05 the total number disposed of in the new District was 740. The number referred to local, sháhi, and other jirgas was as under:—

	Quinquennial period from 1893-94 to 1897-98.	Quinquennial period from 1898-99 to 1902-03.	1904-05.
Sháhi Jirgas	 18	31	18
Local Jirgas	 2,051	1,252	628
Other Jirgas	 40	47	94

Of the 740 cases disposed of during 1904-05, 17 were cases of murder, 16 of adultery, 5 of adultery with murder, 51 of cattle-lifting, 38 of land and revenue, 148 of betrothal and marriage, and 422 miscellaneous, the inter-provincial cases between the people of the District and border tribes of the Déra Ismáíl Khán District being 43.

Local, joint, sháhi and inter-provincial jirgas. Almost invariably cases concerning the people of the country are referred to local jirgas and they include murder, adultery, matrimonial suits, theft, cattle-lifting and land, etc. It is the policy to restrict investigations by the Police, so far as possible to cases occurring among the non-indigenous population. Important cases, those affecting two tribes, or any in which perverse or unsatisfactory decisions are given by local jirgas are generally referred to the sháhi jirgas at Quetta and Sibi or to the inter-provincial jirgas at Fort Munro. Cases between the people of this District and the Largha Shíránis across the Takht-i-Sulaimán in the Déra Ismáil Khán District are referred to the joint jirgas held in alternate years at Mánikhwá and Drában (Déra Ismáil Khán District).

The members of local jirgas are selected from among the sardurs, maliks, and headmen of the several tribes selection of living in the District. Officers of the Zhob Levy Corps are also sometimes chosen for the jirgas held at Fort Sandeman. In appointing the members of the local iiraas. regard is had to Section 11 of the Frontier Crimes Regulation, 1901. In the case of the shahi jirgas, only the sardars. and headmen of the tribes actually concerned in the cases referred to those jirgas are nominated as members of them as these iirgas are held at a great distance from the District.

JUDICIAL. System of members.

Prevalent arime.

There are no tribes or parts of the District in which the crimes above mentioned can be declared most prevalent. Adultery is comparatively more prevalent in the Hindubágh and Kila Saifulla tahsils, and in the latter tahsil often results in murder. Cattle-lifting was once practised by the Wazirs in the Fort Sandeman tahsil, but since the formation of the North-West Frontier Province, crimes of this nature have almost disappeared. The same may be said of the Sulaiman Khéls living on the Afghan border.

The awards of the jirgas are generally acceptable to the Acceptance parties concerned. No appeal lies in these cases, but the of findings by Agent to the Governor-General has powers to revise the decisions of the Political Agent.

parties.

In the early days of its occupation fanatical attacks on Europeans especially and also on non-Muhammadans were unfortunately of somewhat frequent occurrence in the District and during the period 1890 to 1905, there were 18 such cases. The most conspicuous of these were—(1) the attack on the 14th of September, 1890, on a sowar of Lieutenant Godfrey's escort between Bábar and Lakaband: (2) the wounding of Mr. H. Humfress, Executive Engineer. Zhob Division, in October, 1892, at Kazha by a Khoidádzai named Mehrbán; (3) the wounding of Lieutenant Patterson. of the Commissariat Department, in April, 1893, at Fort Sandeman by a Músa Khél named Azím; (4) the murder of

Fanatical outrages.

JUDICIAL.

Sergeant Williams, of the Commissariat Department, at Fort Sandeman by a Kibzai in September, 1894.

Fanatical cases are dealt with under the Murderous Outrages Regulation IV of 1901. Among its more important provisions may be mentioned the power which it gives to the Sessions Judge or Deputy Commissioner of the District or to any Magistrate of the first class especially empowered by the Local Government or by the Sessions Judge or Deputy Commissioner, after the commission of an offence, to try a fanatic, to pass orders as to the disposal of the offender's body if he is convicted and to forfeit all his property to Government. No appeal lies from any order made or sentence passed under the Regulation, and the court may, on the recommendation of a council of elders or after such enquiry as it may think necessary, take measures against any community or individual with whom a fanatic is or has been associated in circumstances which satisfy it that, by reasonable prudence or diligence on the part of the community or individual, the commission or attempted commission of the offence might have been prevented. Such measures include fine and forfeiture of revenue-free grants, remissions, and allowances.

Registration.

The Indian Registration Act III of 1877 is in force in the District. The Political Agent is the Registrar and the tahsildars of Hindubagh, Kila Saifulla, and Fort Sandeman are Sub-Registrars within their respective sub-districts. Mutation registers have been started in the Kila Saifulla and the Hindubagh tahsils since 1904 when after the completion of the survey, the settlement records were handed over to the tahsildars. But in these, and the Fort Sandeman tahsil, many transactions are still carried on verbally. Table XIV, Volume B, shows in detail the number of documents registered, the revenue realized and the expenditure incurred during each of the 12 years 1893-94 to 1904-05 and the following abstract indicates

the general nature of the small amount of work which is Judicial. done :--

Annual average of 10 years 1893-94 to 1902-05,							1904-06,				
	ocumer register		ng copying			Documents registered.			g copying		
	Optional.		includi		•		Optio	nal.	ncludin		
Compulsory.	Relating to immove able property.	Others.	Total realizations, including copying fee.	Total expenditure.	Number of offices.	Compulsory.	Relating to immove able property.	Others.	Total realizations, including fee.	Total expenditure.	Number of offices.
17	1	11	Rs. 70	Rs. 34	3	18		13	Rs. 72	Rs. 31	4

The 18 compulsory documents shown as registered in 1904-05 chiefly relate to transactions connected with immoveable property between agriculturists themselves. There was only one mortgage by an agriculturist to a non-agriculturist.

The Zhob valley was occupied at the end of 1889 and up FINANCE. to March 31, 1890, the revenue and expenditure were Brief history. treated as Imperial.

From the 1st of April, 1890, the revenues of the Bori, Zhob Provin-Khétrán, and Zhob valleys and the expenditure connected with their administration were classed as provincial. provincialised items of expenditure excluded the pay of the Political Agent, Assistant Political Agent, Zhob Levy Corps, Mando Khél levies (Rs. 25.000) and the cost of the Gomal road. but they included the cost of the police and levies in the Bori valley (Rs. 13,800 + 4,250) and the new Khétrán levies (Rs. 9,840). During the three years, ending with March 31, 1893, in which this arrangement lasted, the revenue averaged Rs. 3,85,449 and the expenditure Rs. 3,12,075 per annum.

232

FINANCE.

Corps Contract.

Levies and Police Contract.

A separate contract for the Zhob Levy Corps was sanc-Zhob Levy tioned for three years; the allotment for 1890-91 was Rs. 1,64,290 and in each of the following two years Rs. 2.47.200.

> A similar contract for the police and levies of the whole Province was sanctioned for three years, ending with March, This contract did not include the Zhob valley 1893. levies, the annual cost of which was Rs. 1,20,000 but included the cost of levy posts for the protection of the road and telegraph line on the Loralai, Déra Gházi Khán route, and the Bargha Shíráni service (Rs. 7,680), was subsequently added.

New Contract.

On the termination of these three contracts, a combined quasi-provincial contract was sanctioned for four years from the 1st of April, 1893, in which were also included the pay and allowances of the Political Agent and the Assistant Political Agent.

First quasi-Provincial Settlement.

From the 1st of April, 1897, a fresh quasi-provincial settlement was sanctioned for a period of five years for the whole of the Baluchistán Agency, and the settlement was again renewed from April, 11902; the salaries debitable to head "Political Agents" being excluded from the arrangement.

Table XV, Volume B, shows the revenue of the District from all sources in each year from 1897-98 to 1904-05. main sources of income are Land Revenue. Excise and Stamps, to which are added minor items under Law and Justice, Jails, Registration, Assessed Taxes, Public Works, and Miscellaneous. The annual receipts during the quinquennial period of 1897-98 to 1901-02 averaged Rs. 1,28,694, to which Land Revenue contributed Rs. 1,07,814; Excise, Rs. 11, 085; Stamps, Rs. 4,753; and other items Rs. 5.042. In 1902-08 the receipts amounted to Rs. 1,29,726, while in 1904-05 they were Rs. 1,25,984. In the last mentioned year Land Revenue contributed Rs. 1,01,782 or about 80 per cent.; Excise, Rs. 9,897; Stamps, Rs. 5,057; and

the balance of Rs. 9,248 was made up of Registration. Law Finance. and Justice, Miscellaneous and Public Works. land revenue is chiefly levied by a share of the produce, the receipts must necessarily vary with the seasons. In 1904-05 the decrease under this head was due to the very poor kharif crop. Owing to the drought which prevailed in August and September, 1904, the dry crop cultivation failed altogether and the out-turn of irrigated crops was also less owing to diminution of water supply of the springs and kárázes.

Khán Bahádur Mír Shams Sháh, Settlement Extra Assistant Commissioner, says* in respect to the Kila Saifulla Early revenue tahsil that "its early history is so wrapt up in obscurity that it is difficult to ascertain what revenue was realised from it in the time of former kings. Probably under the Mughal rule, Kila Saifulla and the Hindubágh tahsíls formed a part of Pishin (then a District of Kandahar Province) which. according to the Ain-i-Akbari, was subject to a regular In the time of Ahmad Shah Abdali the revenue demand. Sanzar Khél Kákars, who form the majority of the inhabitants of the tahsil paid one sheep per flock as annual revenue. When Ahmad Shah bestowed the Government of Zhob on Békar Nika of the Jogízai family, he and his successors received revenue at varying rates. When Muhammadzai Bárakzai Afghans succeeded the Sadozai dynasty, it does not appear that any regular revenue was realised by the supreme government from this iláka, as the descendants of Békar Nika regarded themselves independent governors or

REVENUE. history.

In the Hindubágh Settlement report (1905) it is stated on the information furnished by leading men " that in the time of Ahmad Shah the Sanatia Kakars paid-one tenth of the gross produce of their lands and the Sanzar Khéls one sheep per flock. The tribal headmen collected the revenue and paid at Kandahar, where they were presented valuable Khillats.

rulers of Zhob."

^{*} Final Report on the Settlement of the Kila Saifulla tahsil (1906),

Bahádur Khán and Hasan Khán Sanatia Kákars, and Lái Khán and Khwája Khizar, Sanzar Khéls, acted as collectors of revenue one after the other. It is also said that in Ahmad Shah's time the tribes supplied 8 men-at-arms and this was commuted to revenue in kind. Bahadur Khan, Sanatia, accompanied Ahmad Shah to Delhi and died there. When Ahmad Shah became feeble, the Kakars threw off the yoke. Later on Khushdil Khán, Afghán Governor of Pishín, fixed a cash assessment of Rs. 200 on this iláka which was raised to Rs. 240 in the following year and to Rs. 280 later. Owing to this enhancement the people became discontented and fled to the hills. Shahbáz Khán, Kákar, got a cavalry and infantry detachment from Pishin and fought with the people, burnt their crops and houses and many were killed. some of the leading men were kept in Pishin in confinement for a year. The people mustered strong, stormed the Khushdil Khán fort and released their men." * It would appear that latterly at all events such right to the revenue as existed in pre-British days, lay with the Jogizai Sardár Khels, and that they levied certain contributions voluntary or otherwise from the tribesmen. In 1897 Captain Archer. then Political Agent, Zhob, computed that the annual income of the Jogízais was about Rs. 16,270 and comprised the following items :---

	Rs.
Contributions paid by the Mar	
Khéls	240
Contributions paid by the Lawanas	of 200
Contributions levied from the Hi	
traders of Mina Bázár	200
Grain contributions paid by Barat Kh	
Sargaras of Hindubágh, Márdáns	58 is
and Haidarzais about 220 maunds	550

^{*} Report on the settlement of the Hindubágh taháil by Qási Abdulla Ján (1905).

Rs. LAND REVENUE Contribution for barazar or noon-day 80 One sheep annually from every flock in Central Zhob and the hills lying to the north of it and from flocks passing through the valley to the grazing ground (3,000 sheep)... ...12,000 Transit dues at Rs. 2-8 per camel load of merchandise passing through the country 3,000

When the country passed into the hands of the British Modern Government, the contributions levied by the Jogizais ceased, revenue history. and they were compensated by muáfis and allowances which are mentioned later. The revenue was imposed at the rate of one-sixth of the gross produce, which is the existing rate (1906), and it is levied by division of the grain heap (batái) or appraisement of standing crops (tashkhis) and in some cases by a cash rate on green crops. Government takes the same share of the straw also, but the straw of rice and millets (china and kangni) is not taxed. In 1895-7, Mr. J. A. Crawford, the Revenue Commissioner, imposed cash assessments for short times varying from three to five years on 116 irrigated villages in Central and Upper Zhob, the annual assessment being Rs. 21,822 including Rs. 320 on account of grazing tax payable by 16 Mehtarzai villages in Hindubágh. These assessments were based upon the consent of the people concerned and upon an average of the Government share of the produce in past years, converted into cash at moderate rates, the cash total being subject to a remission of 10 per cent. On the termination of these contracts, the old system was reintroduced, though in a few villages in the Fort Sandeman tabsil temporary contracts still exist.

As already mentioned the revenue on miscellaneous crops Cash rates on is assessed by rough measurements in cash at rates which miscellaneous

REVENUE. The following table shows the rates at present (1906) prevalent in each tabsil:—

		RABI PER	ACRE.	KHARÍF PER ACRE.							
Name of Place.	Sabz khurda or crops cut green for fodder.	1 -	Water- melons.	Onions.	Lucerne	Carrots and other vegeta- bles.	Sabz khurda or crops cut green for fodder.				
Fort Sande- man tabsil.		and 9 on 1st, 2nd, and 3rd class, res- pectively			As. 4 per maund.		Rs. 10				
Hindubágh and Kila Sai- fulla tahsíls.	Rs. 8-5-4	Rs. 4, 6,	ively. Rs. 4, 6, and 8.	Rs. 10 and 18.	Rs. 8-5-4	Rs. 5.	Rs. 8-5-4				

Sale of revenue grain.

The Government share of revenue grain and straw ascertained by batái or tashkhis is generally sold back to the zamindárs at reasonable rates which have to be approved, for each harvest, by the Revenue Commissioner.

Survey and Settlement.

With the exception of a few villages in the Fort Sandeman tahsil, which are under temporary cash assessment, fixed cash assessment has not been introduced in any part of the District. In the two tahsils of the Upper Zhob subdivision, i.e., Hindubágh and Kila Saifulla, a survey was made and records of rights prepared in 1901-02. As a preliminary step to settlement operations, boundaries of mauzas or villages were fixed and a traverse survey was made by an officer of the Survey Department of India. The survey was made on the plane table system and maps were prepared on the scale of 16 inches to a mile or 60 karams to an inch. The operation were confined only to irrigable lands and such sailába, khushkába, and uncultivated plots as came within the limits of irrigable area. Kakar Khurásán and the village of Kajír in the Hindubágh tahsíl were excluded from the operations.

^{*} A haram is equivalent to two paces.

LAND

REVENUE.

In the Hindubágh tahsíl the survey was field to field in all circles except Kazha which was subjected to thákbast * owing to the khám (temporary) division of land prevalent there. In the Kila Saifulla tahsíl, all villages were subjected to thákbast survey owing to the khám division of land except in certain villages (most of which are situated on hill sides) in which the survey was made field to field. The following table shows the area surveyed in each tahsíl:—

						,						
	.08.	68.	ngs.	Acres.		ğ.	Area.		Unc	APLIAT	THO.	
Tahsii.	No. of Villages.	No. of Estates.	No. of Holdings.	Irrigable Area in Acres.	Gardens.	Dry Crop Land.	Dry Crop Land. Total Cultivalbe Area.		Cha- man or Gras- Land	Un- culti- s vable	Tota	Grand Total.
					Acres	Acres	Acres	Acres	Acres	. Agres.	Aeres	Acres.
Kila Saifulia	. 65	4 14	1,350	21,642	29	55	21,788	6,676	17	1,881	8,574	30,307
Hindubagh	75	363	7,018	17,778	71	380	13,219	6,342	71	8,694	15,107	33,336
Total	127	477	8,374	39,457	100	435	10,062	13,018	88	10,575 2	3,681	13,643

^{*} A survey showing only the boundaries and different classes of land in an estate as distinguished from field to field survey.

LAND BEVERUE.

Record of rights and nance.

In the course of the Settlement Survey a record of rights was prepared for each of these tabsils and included Index to Settlement record; list of assessment (column of assessment left blank), Field map; Field index; Fahrist mahalwar or list of documents relating to each estate; pedigree its mainter table of proprietary body; statement showing division of water: statement showing number of holdings, the names of owners, tenants, mortgagees, and their respective shares in the produce; list of water mills (column of assessment left blank); statement of revenue free holdings; and Robkári-Akhir or final orders on each record. In June, 1905, rules were issued for the guidance of revenue officials for proper maintenance of these records, and among other matters it was directed that every patwari was to maintain for each of the maháls or estates in his charge, a harvest inspection register; a return of crops; a register of mutations; a yearly total of transfers; Jamabandi or register of holdings of owners and tenants, showing land held by each and amounts payable as rent, etc., and yearly register of area, and that patwaris should first of all prepare, under the supervision of the Field kánúngos, a copy of the field maps of their own estates by means of tracings on calico, as described in Appendix VIII of the Manual of Mensuration for patwaris, this map to give only the shape of the fields and their khasra or numbers without giving their dimensions and to be called shajra girdáwari. It was to be used by the patwaris at the time of making crop inspections, and being handy and portable would be most suitable for out-door work.

> It was not considered advisable to introduce a cash assessment in these tahsils as no reliable data existed on which a cash assessment could be based. The amount of revenue realized during past years by appraisement of crops did not furnish a criterion that could be relied upon, for by valuation of crops it is difficult or rather impossible to form a correct estimate of the amount that can fairly be claimed as

the Government share. Moreover, had a cash assessment been attempted on the basis of the revenue receipts of previous years, it would have entailed a considerable loss to Government, as these years were generally bad and the receipts then stood very low; the tahsil in general had also never been subjected to batái and it was, therefore, difficult to form a correct estimate of the Government share of the produce that could have formed a basis for assessment, and lastly the people as a whole were opposed to cash assessment and a settlement by consent involved a considerable The operations, however, so far as they went were not void of value. Khán Bahádur Mír Shams Sháh, Settlement Extra Assistant Commissioner, concluded his report on the Settlement of the Kila Saifulla tahsil by saying that "the records prepared in the Settlement, and the annual papers that shall be prepared hereafter in connection therewith will be of undoubted help in placing the revenue administration of the tahsil on a firm basis. The record of rights would furnish an accurate and correct information to officers regarding nature of rights and other points connected with cultivation of lands. Besides, a settlement record will provide a valuable material for checking accuracy of the present rough revenue assessments and would facilitate the settlement of land disputes. Moreover in the course of the preparation of the record of rights, many inter-village and inter-tribal boundaries have been settled and it would have the effect of lessening further disputes and thus tend to increase cultivation."

As the major portion of the revenue is levied in kind, the Statistics of aggregate amount collected fluctuates with the character of need the agricultural seasons and the prevailing prices. Table XVI, Volume B, shows the revenue in kind realised in each tabsil for each of the eight years from 1897-8 to 1904-5 and the average price at which each article was sold. principal item is wheat. The largest amount of produce collected was 16,776 maunds in 1901-2, which was sold at

an average rate of Rs. 1-14-1 a maund, and the lowest 8.128 maunds in 1900-1 which brought an average price of Rs. 2-13-2 per maund. The decrease in the latter year was attributed to the insufficient and late rains for the rabi crops gathered that year. In 1904-5 the total revenue in wheat amounted to 15,532 maunds and was sold at an average rate of Rs. 2-0-11 per maund. Of the total, 7,242 maunds were contributed by Kila Saifulla and the balance in about equal proportions by the Hindubagh and Fort Sandeman tahsils. The principal items of revenue from the kharif harvest in 1904-5 were maize 2,488 maunds (average price Rs. 2-0-5 per maund), and rice 840 maunds (R. 1-10). The largest amount of juári (5.756 maunds) was realised in 1903-4 (price R. 1-5-4), but only 68 maunds were collected in 1904-5 owing to failure of crops due to drought.

Table XVII, Volume B, besides embodying the figures obtained from table XVI, shows the land revenue realised in cash, such as temporary contracts, miscellaneous land revenue, tax on water mills and grazing tax during the eight years ending with March, 1905. The annual average receipts for the quinquennial period ending with the year 1901-2 amounted to Rs. 1,07,814, the highest amount Rs. 57,065, being contributed by the Fort Sandeman tahsíl and the lowest Rs. 19,089 by the Hindubágh tahsíl. During 1904-5, the total receipts of the District amounted to Rs. 1,01,782; Fort Sandeman tahsíl Rs. 42,842; Kila Saifulla Rs. 31,481; and Hindubágh Rs. 27,459

Land tenures, Jágirs, The land tenures of the District are of a simple nature. Government is the sole collector of revenue except in the following localities where the Jogízai jágirdárs are permitted to levy one-tenth of the produce as revenue—(a) Zarghún Khán son of Sardár Shahbáz Khán, Jogízai, from lands in the Ghutti Káréz owned by others than Jogízais; and (b) Sardár Bahádur Nawáb Bangal Khán, Jogízai, from 14½ shavároz of Mánki Káréz in the Kila Saifulla

tahsíl. These jágírs, among others, were sanctioned in view of the importance of the position held by the Jogizais before the occupation of the valley by the British Government. The revenue free grants and allowances enjoyed by this family are mentioned later in this section.

LAND REVENUE

Most of the cultivators are peasant proprietors; the only The origin other class represented in the District are tenants, the and character majority of whom are only temporary. The greater part of the land remained uncultivated and was gradually occupied by the different tribes first for grazing and then for cultivation. A general distribution of the country among the principal sections of the Sanzar Khéls is said to have taken place in the time of Sanzar Nika. The division among the sections themselves was made in proportion to the number of families or among individual males. Land was also acquired as compensation for the loss of men killed in blood feuds, occasionally in part payment of bride-price, and hamsayahs who had sought protection with tribes were sometimes admitted into the tribes and given a share in the tribal land. Thus the Sibzais. originally Hotak Ghilzais, were amalgamated with the Akhtarzai Kákars and givon a share in land.

Cases of acquisition by purchase are also met with, and the Khostis are said to have purchased lands from the Kibzais, the Safis in Fort Sandoman from the Mando Khéls, and the Kabulzai. Shamamzai and Sulaimanzai branches of the Kibzais bought the Jhalar lands from the Utmán Khóls. In these various ways a body of peasant proprietors has arisen, owning their own lands and cultivating their own fields.

The greater portion of the lands in all the three tahsils is permanently divided, but there are a few exceptions to periodical distribution. this. The lands in Kazha in the Hindubágh tahsíl are divided for each harvest according to the shares in water held permanently and the same system applies to all irrigated lands in the Kila Saifulla tahsil except to small

Custom of

patches of land on hill sides irrigated by small springs (teakhobai).

The water raised from the Zhob river for irrigation between Bádinzai and Mughal Kot is permanently divided. but the lands in some of the villages are liable to encroachment; by the river and in such villages periodical division of lands takes place. The Jhalar lands were purchased by the Kibzais of Gosa from the Utmán Khéls, and in 1899 they were divided among the three sections : Kabulzai half, Shamamzai and Sulaimanzai half. The former made a permanent division of their lands among individuals, but the latter two sections hold their land jointly and distribute it for each harvest among all adult males present in the village. The lands of the Apozai village are permanently divided, but for the kharif harvest in each year the water obtainable from the Siliáza stream is distributed among male members who themselves or whose families are present in the village, a minor getting half a share.

Tenants and

The lands are as a rule cultivated by the landlords themselves, but in a few cases tenants are employed who are tenants-at-will, ordinarily changed after each harvest. In some cases tenants are engaged for longer periods varying from 5 to 20 years, and in such cases they cannot be ejected within the term of their tenancy. Cases of this sort are known in the Kila Saifulla and Fort Sandeman tahsils. In the latter tahsil the ajal system prevails among the Mando Khéls, under which a tenant undertakes to construct a water channel, improve and cultivate waste land, bear all expenses for a fixed term of years and to pay the landlord, as rent, a share of the produce varying from one-eighth to one-tenth after deducting Government revenue. At the end of the term the land and water are handed over to the landlord without any compensation.

Size of holdings.

No information is available for the Fort Sandeman tahail with regard to the size of holdings, as the tahail has not been surveyed. In the remaining two tahails the data are

incomplete, as no distinction had been made in the Settlement records between the number of holdings in irrigated and in dry crop areas, and large areas of this latter class outside the irrigated villages have not been surveyed. The following remarks are, therefore, necessarily incomplete.

In the Kila Saifulla tahsil the total number of holdings recorded during the survey, was 1,356, and the area of irrigable land, including gardens 21,678 acres which would give about 16 acres as the size of a holding in irrigable land. Besides this there were 6,676 acres of cultivable land which would add about another 5 acres to a holding In the Hindubagh tahsil the total number of holdings was. 7,018 and the area of the irrigable land including gardens was 17.849 which allows about 21 acres as the area of a holding. The cultivable area in this tahsil was 6,342 acres which would add another acre to a holding. In connections with these statements it must be remembered that the irrigable land is classified according to its capacity to yield crops, the greater part of it yielding a crop only once in 3, 4, or 5 years.

The headman or malik as he is locally called, has always Headmen or been a prominent figure in the village and tribal organi- their remusation, and his duties have consisted in arbitrating neration. between disputants, in keeping order and peace, and in collecting the State demand where revenue was imposed. In areas remote from headquarters he still plays a part of no little importance. The final appointment and removal of the maliks rests with the Political Agent who is guided by the recommendation of the Sub-divisional officers and tribal considerations. These maliks are usually selected from men who are proprietors of large areas in a mahal, who command the respect of their tribesmen and have a recognised tribal position. Their duties are primarily to assist in the collection of the Government revenue, to keep order and to inform the tahsil officials of the occurrence of any serious crime and of other important matters. A certain

number are employed in the levy service. The maliks are paid lambardári allowances (haq-i-malikána) on the gross land revenue, including grazing tax and tax on water mills, at a uniform rate of 5 per cent.

Incidence.

As already mentioned the revenue is still levied in kind in the greater part of the District, and the figures of incidence of revenue per acre are not available, but the calculations made in the course of the survey (1902-3) with regard to the average annual revenue recovered from the irrigable or abi cultivation during 10 years (1892-3 to 1901-2) gave the following results for the Kila Saifulla tahsii:—

C	ircle.	Annual recoipts per irrigable acre.	Annual receipts per cultivated acre.				
				Rs. a. p.	Rs. a. p.		
Kila Saifulla	•••	•••		0 11 10	1 14 5		
Ali Khél	•••	•••	•••	1 3 10	2 11 10		
Musáfirpur	•••	•••	•••	2 2 4	2 15 8		

The incidence is comparatively low in the Kila Saifulla circle which is partly due to the fact that the area annually under crop is small and the chief crop raised is *china* which is a cheap article.

System of remissions and suspensions.

The revenue being levied in kind the results of indifferent seasons or of calamities adjust themselves automatically, and the necessity for suspension or remission of revenue seldom arises. Where the revenue is paid in cash, the Politica Agent may direct that the whole or part of the land revenue falling due in an estate be suspended in cases of sovere and continued calamity. All orders thus issued must be at once reported for the sanction of the Revenue Commissioner, who may cancel or modify them. Similarly, proposals for remission of land revenue have to be reported to

the Revenue Commissioner, who may sanction remissions up to a maximum of Rs. 250. Cases involving larger sums require the sanction of the Local Government. Remission of grazing tax and of the tax on water mills, may also be granted when there is unusual mortality due to a drought and scarcity of fodder, or when a mill has, owing to no fault on the part of the proprietor, not been in working order.

LAND REVENUE.

The rules in force are: - (a) that when waste land is Exemption to reclaimed with the aid of a takavi loan and is brought under from revenue. cultivation, no revenue may be assessed on it until the expiration of three years, reckoned from the beginning of the harvest first reaped after the reclamation was effected. If no takávi loan was obtained, the period of exemption may be extended to four years; (b) when khushkába land has been improved by irrigation with the aid of a takávi loan, the period of exemption is four years; in the case of waste land which has been improved by irrigation or of an improvement, either of khushkába or waste, which has been made without the aid of a lean, the period of exemption may be extended to five years; (c) new water mills, constructed with or without the aid of Government loans, are, on sufficient reasons being shown, exempt from taxation for two or three years as the case may be. In special cases these periods may be further prolonged.

No final decision has yet been arrived at in regard to waste waste lands. land. In the draft of the proposed Land Revenue Regulation for Baluchistán, which is still (1905) ander consideration, a provision has been included giving Government the presumptive right to all lands comprised in hills, forests, and to unclaimed or unoccupied land.

Under the provisions of the Civil Justice Law and Rostrictions-Regulation, agricultural land cannot be sold in execution of against transfer of land to a decree without the sanction of the Local Government, and non-agric u lit is usually made a condition of the sale that the land shall not be sold to non-agriculturists. In the draft Land Revenue Regulation above referred to, a provision has been made

that no agricultural right in land shall be alienated by transfer, sale, gift, mortgage, or other private contract to any person—(1) who is not entered in a record of rights as a member of the proprietary body of an estate; or (2) if the transferee is resident in a part of Baluchistán where no such record of rights has been prepared, unless the transferee is a Pathán or Baloch land owner, and unless he is approved by the headmen of the village where the land is situated. This draft has not yet (1905) become law, but its provisions are taken as a guide and land cannot be sold and mortgaged with possession to aliens without the permission of the District officer.

Government land and water.

The total area of Government land occupied by the Fort Sandeman Civil and Military station is 558 acres, of which 229 acres lie in the Civil and 329 in Military limits. The greater part of this land was waste and no compensation was therefore paid for it. Payment was, however, made for-(a) 30 acres of land and 3-20ths of the Siliáza water bought in 1890 for Rs. 1,400 from military funds; (b) 184 acres of land bought for Rs. 882-12-0 from Provincial Revenues for the Zhob Levy Corps lines, and 4 acres bought from the Bazar Fund; and (c) 4-20ths of the Siliáza water purchased in 1897 for Rs. 6,600 from Provincial Revenues. The Government, therefore, owns 7-20ths of the Siliáza stream, the water of which is used for the irrigation of gardens and roadside trees and of land leased for cultivation. the lessees paying one-third of the produce as revenue and rent.

In the course of the revenue survey the area of Government lands in Hindubágh tahsíl was ascertained to be 87 acres, chiefly under roads, rest houses, and other Government buildings, but including also about 2 acres of land taken up for a Government garden. This latter land and also one-eighteenth of the whole supply or half shavaroz of the Kam Karéz were purchased for Rs. 225-12-6 and Rs. 400, respectively.

In the Kila Saifulla tahsil the Government lands measured by the Settlement staff in 1902-3 amounted to 106 acres, of which 9 acres were irrigable, 69 acres cultivable and 28 acres uncultivable. This includes about 62 acres * of land at Tánishpa, which, with a spring of water, was purchased in 1892 for Rs. 2,660 from Murád Ali and Mullá Bostán Sháhézai. A portion of this is leased for cultivation and one-third of the produce is levied as rent and revenue.

LAND Revenue.

The number of water mills in each tabsil is shown in the Water mills. following statement:—

Tahsíl.	Revenue Free.	Revenue Paying.
Fort Sandeman	6	14
Hindubágh	1	28
Kila Saifulla	4	7
Total	11	49

The water mills are assessed annually, the basis of assessment being one-sixth of the receipts.

The average assessment per water mill for the year 1904-5 amounted to Rs. 12-11-7 in the Fort Sandeman tahsil, Rs. 3-14-11 in Hindubágh, and Rs. 12-14-10 in the Kila Saifulla tahsil.

In pre-British days the flockowners gave a sheep or goat Grazing texannually from every flock to the Jogizai sardár. Grazing tax or timi was for the first time levied in the District in 1891-2 at the following rates which were sanctioned for the whole of the Agency:—

•			ns.	a.	р.
Male camel	•••	•••	0	8	0
Female camel	•••	•••	1	0	0

^{*} The Political Agent's office records show that the area acquired at Tanishpa is 52 scres, 3 roods, 33 poles, of which 43 acres, 1 rood, 1 pole are culturable.

			Ks.	a.	p
Buffalo	•••	•••	0	8	0
Cattle	***	***	0	6	0
Donkey	•••		0	4	0
Sheep or goat	•••	•••	0	1	0

Animals which are exempt include horses, bona fide plough bullocks, and milch cows kept for private use by villagers.

Collections are carried out once a year by the tahsil establishment with the aid of the headmen, either by actual enumeration of the cattle (mál shumári), or by temporary contracts (ijáras). In cases of nomads, the enumeration system is generally adopted. Headmen who assist are paid 5 per cent. on the collections as their remuneration. The income derived from the grazing tax collected throughout the District during the year 1904-05 was as follows:—

		Rs.
From settled inhabitants	• • • •	17,758
From nomads		22,395

Total ... Rs. 40,153

The proceeds of the tax are credited into the District accounts under Land Revenue, and the average collections of the quinquennial period, ending with the 31st of March, 1905, show that the sum obtained from it amounted to 33 per cent. of the total land revenue receipts, of which 17 per cent. was contributed by the settled inhabitants and 16 per cent. by nomads.

Special arrangements have been made with the Sulaimán Khéls for the grazing tax payable by them and these have been described in detail under population. The tax paid by them has averaged Rs. 2,062 per annum between 1898-9 and 1903-4, while the receipts in 1904-05 were only Rs. 550. In 1905-6 they rose to Rs. 906. The headmen are paid allowances aggregating Rs. 1,550 per annum.

^{*} Page 82, Sulaimán K héls.

In 1896 it was brought to notice that the Powindahs proceeding from Afghánistán through Zhob to the Punjab were taxed thrice, viz, in Afghánistán, Zhob and Déra Ismail Khan and the Punjab Government and the Agent Powindahs in to the Governor-General agreed that Powindahs proceeding to the Punjab through the Záo, Chúhar Khél Dahána and Vihowa passes, should, in future, be taxed only once in Zhob and at Zhob rates, and that the collections realized from these Powindahs whether they stayed a long or short time in Zhob should be shared between the Puniah and Zhob in the proportion of three-fifths and two-fifths, respectively, after deducting the cost of collecting establish. ment; the arrangement was first introduced for 2 years from April, 1897, but was subsequently extended to March, 1902. From 1897-8 to 1900-1 the total receipts amounted to Rs. 18,803, the expenditure on establishment and lambardári allowances was Rs. 2,021, leaving net receipts Rs. 16,782,

LAND REVENUE.

Zhob.

On the creation of the North-West Frontier Province, and the transfer to it, among others, of the Déra Ismáil Khán District from the Punjab, the question of apportionment of this revenue came under consideration, and it was arranged in 1903 between the North-West Frontier Province and Baluchistán administrations that the rates of grazing tax on all Powindahs proceeding by passes between the Gomal and the Khar pass should be raised to the amounts noted in the

of which Rs. 10,069 were credited to the Panjab Government.

Male camels, from As. 8 to 12 per head. Female camels, from Rs. 1 to 1-8 * Male camels, from Sheep and goats, from As. 1 to 2 Cows and bullocks, As. 6 old rate Donkeys, As. 4 old rate

margin, * and that no Zhob posts for the collection of grazing tax should

be established east of Domandi, save the one at Mír Ali Khél. The Agent to the Governor-General in Baluchistán agreed to make over to the North-West Frontier Province a lump sum, at the end of the season, being four-fifths of the amount evidenced by such of the tirni receipts issued by Zhob officials as the establishment at Murtaza (North-West

LAND Frontier Province) may be able to collect from Powindahs.

REVENUE. that have reached that point from Zhob.

Revenue free grants, grain and cash allowances.

A detailed list of revenue free grants, grain and cash: allowances sanctioned from time to time since the occupation of the District in 1890 is given in table XVIII, Volume B. The aggregate value of these grants on March 31, 1905, was Rs. 11,262-4-2 which represents about 11 per cent. of the total land revenue, and the following statement shows the distribution by tahsils:—

	Land re- venue.	Grazing tax.			Cach al- lowances	
	Ks.	Ks.	Rs.	Rs.	Rs.	Ks.
Fort Sandeman tahsil.	951-5-11	33-4 -0	20-0-0		••••	1,004-9-11
Hindubégh tabsil.	245-9- 9	27-12-0		759-0-0	******	1,026-4-9
Kila Saifulla tahsii.	1,701-7-6	31014-0	49-0-0	7,020-0-0	250-0-0	9,231-5-6
Total	2,898-6-2	271-14-0	69-0-0	7,779-0-0	350-0-0	11,363-4-2

These figures do not include—(1) the land revenue and grazing tax muáfi enjoyed by the Haripáls in the Fort Sandeman tahsíl, and (2) the grazing tax muáfi, of the Mukám Kahol of the Kila Saifulla Jogísais, the value of which has not been ascertained. Most of these muáfis are for the life time of the grantees, and some for shorter terms, and all are subject to the usual conditions of future good service and loyalty to Government. The muáfis enjoyed by—(1) the Haripáls; (2) the keepers of the shrine of Husain Nika; and (8) the Jogísais may be specially mentioned.

The Haripál muást. The Haripals'are a small tribe (1,598 persons), inhabiting the western slopes of the Shin-ghar range. They claim to be Saiads and are held in considerable respect by the neighbouring tribes. Tradition states that they were invited to take up their present position by the Mando Khéls and Shíránis in order to ensure that part of the country against the Wazir raids, and it is a curious fact that during our occupation of Zhob, the Wazirs have never raided Shin-ghar. When the Zhob valley was first occupied (1890), the neighbouring tribes petitioned that the Haripals should be exempted from the payment of revenue and their lands and cattle were accordingly exempted from taxation, until further orders. The cultivation of the Haripáls is not very extensive, but they have a considerable number of flocks, and many of them are engaged in trade.

LAND REVENUE.

This shrine is held in much respect by the people of Husain Nika Fort Sandeman and especially by the Sulaiman Khels who are an important tribe and of whom some few winter in the District. It was at the request of the Sulaiman Khels. with whom it is very desirable to maintain and cement political relations, that this muáfi was sanctioned until further orders. The land in respect of which mulfi was sanctioned measures 62 acres, 1 rood, and 4 poles, and its annual revenue is about Rs. 114.

As already mentioned in the sections on History and Grants to the Population the Jogízai group among the Kákars have Kila Saifulla. always enjoyed a position of great importance and influence. Writing in 1897 Captain Showers, then Assistant Political Agent, Upper Zhob said: "The Jogizais like other Kákars. trace their origin back through some 23 generations to Central Asian nomads who migrated southwards sometime before we hear of Kak Fourth in descent from Kak comes Sanjar who gave his name to the Sanjar Khél Kákara included among whom are the bulk of the Kákars in the Zhob District. Sanjar's eldest son was Ali, and from Ali in direct succession by the elder branch through eight generations we get Jogi, the ancestor of the Jogizai clan. The Jogizais thus by right of birth stand at the head of

LAND

all the Kákar tribes. It is this position of the Jogízais as REVENUE, the direct elder branch of the Kakars that gives them their importance. Even distant branches, such as the Sanatia Kákars, who have long ceased to have any direct relations with the elder branch, hold the Jogizais in respect. With nearer branches and especially with all those descended from Ali and now known as Shádozais or Drepláris (the Bátozais, Ismáilzais, Daulatzais, Ghorézais, Haidarzais, etc., who inhabit central Zhob) their position has always been fully recognised. They are also said to have been considered the priests of the tribe which has doubtless even further extended their influence and authority. It is quite certain that large voluntary contributions have always been made them for their subsistence by the other tribes of central Zhob.

> "Sanjar had 13 sons, and in the distribution of land that took place among them, the portion that fell to Ali, and through him to his descendants Jalál and Jogi, was the hilly country lying to the north of the central Zhob valley and comprising tracts now known as Khaisára, Rod Jogízai, Khushnob, etc. The country consists principally of grazing grounds, but there are some cultivable pieces also. It was not until comparatively recently, some 3 or 4 generations ago, that the clan acquired the lands they now possess near Kila Saifulla in the main valley. It was about this time too that the clan, having waxed numerous and powerful, assumed a new character, and were able to exact by force, contributions other than those voluntarily made them by the Ali tribes. Their prependerance in central Zhob, therefore, became greater than ever, and at the time of our advent among them in 1890, they were undoubtedly the leading and ruling family in the country."

> The principal personages among the Jogizais before the Zhob valley was occupied were - (1) Sháh Jahan, grandfather of S. B. Muhammad Akbar Khan

the present leader of the Nawub Kahol; (2) Dost Muhammad. father of the late S. B. Nawab Bangul Khan; and (3) Shahbaz Khán, father of Zarghun Khán, The value of the contributions received by the Jogízais from neighbouring tribes and of the transit dues collected by them on merchandise that passed through the country previous to the British occupation, was estimated by Captain Archer to be Rs. 16,270, details of which have already been given under early history of land revenue. These contributions and dues levied by the Jogizais naturally ceased on the occupation of the District by the British, and it was in consideration of these sources of income lost to the Jogizais and to the important position held by them that grain allowances (4,175 maunds), cash allowances (Rs. 5,940 per annum), Levy service (Rs. 3,840 per annum), and land revenue-free grants (valued at Rs. 925) were granted to the Jogízai family. In 1897, fresh proposals were submitted by Captain Archer, then Political Agent, to improve the

| Rs. | Rs. | Rs. | Rs. | Rs. | S.940 | Rencfit from Levy Service | Rs. | Rs.

position of this family. He computed that the direct benefit derived by them from various concessions made amounted annually to Rs. 17,295; and, though this exceeded by about Rs. 1,000, the estimated value

of what they received before the British took over the country, he advocated that it was for a number of reasons expedient to treat them liberally, and he pointed out that there was no doubt that in addition to the regular and quasi-voluntary contributions, many of the members of the family had managed to obtain considerable additions to their income by methods which we should be apt to call plunder and extertion, but which were not severely regarded by the public opinion of the country; that the family was already large and must be expected to increase; that the younger branches

and the younger members of the elder branches were very badly off, while their character as Jogizais prevented their merging into the general population as common labourers; and that the expenses of the chief men, and especially those of the working chief, S. B. Muhammad Akbar Khán, were now very heavy, part of them being incurred in connection with Government work. On the recommendation, therefore, of Captain Archer, the following further grants were sanctioned for the Jogizais, the cash allowances being given from the Levy Service:—

(1) The grant of monthly allowances of Rs. 50 to Said Khán and Ayúb Khán, sons of Sháh Jahán Khán; Rs. 30 each to Kalandar and Gul Karam, half-brothers of S. B. Bangul Khán; Rs. 30 to Dewána and Báz, nephews of Dost Muhammad; Rs. 10 to Paigul, Jalálzai; and (2) the remission of the whole of the Jogízai grazing tax.

Hill Jogisais.

The hill Jogizais are represented by the headman Khande Khan who did good service in bringing about the capture of the outlaw. Gola, Músá Khél, who had committed numerous ontrages in Zhob. He also did excellent service with the Baloch-Afghan Boundary Commission. In 1899 the Government of India sanctioned the remission of the grazing tax in favour of these Jogízais on the understanding that if the flocks of the tribe ever became so numerous that the tax on them would exceed Rs. 200 a year, the tax would be levied on all animals in excess and distributed proportionately over the owners. In 1903 the remission of land revenue of the entire lands at Rod Jogízai held by Khande Khán with others (valued at Rs. 142-10-7) was also These concessions were in addition to the sanctioned. Levy service and grain allowance (250 maunds) enjoyed by Khande Khán.

The Jogizai land revenue mulifis amounted on the 31st of March, 1905, to Rs 8,818-4-4, excluding the grazing tax remitted in favour of the Mukam Kahol Jogizais. The

following table shows the details of the muáfie, etc., excluding Levy Service, enjoyed by this family:—

Name of Reci- pients.	Land Revenue.			Grazing Tax.			М	Water Mills.			Grain Allowances (value computed at Ans. 2 a Maund).			lask lo w	ь .	TOTAL.		
Mukám Kahol, Nawáb Kahol.	Rs.	8.	р.	Rs.	8	P	Rs.	a.	P.	Rs.	lª.	P.	Rs.	a.	P	Ra.	ľ	p.
8. B. Muhammad Akbar Khán	257	11	1				15			2,000		0			ļ	2,272	1:	1
Said Khán						ļ	•••	ŀ	١.	200	0	0				200	ŀ	0
Narre Khán					ļ	ļ		١.	١.	200	0	0			١	200	l	0
Mir H áj i			١.		ļ	ļ		١.	ļ.,	200	0	0		ļ	ļ	200	١	0
Shádi Gul			۱		ļ	١		١.,	١	200	0	0				200	0	0
Muhammad Sadiq		ļ	ļ		ļ	ļ		ļ.,	ļ	100	0	0				100	0	0
Lájwar	•••				١	ļ		ļ	١.	100	0	0			٠.,	100	0	0
Muhammad Afsal			٠		Ŀ	<u></u>		<u> </u>	٠				250	0	0	250	0	0
Total	257	11	1	•••		<u></u>	15	0	0	3,000	0	0	250	0	0	3,522	11	1
Isháq Kahoi.																		
8. B. Nawáb Ban- gul Khán	450	0	0		ļ		20	0	0	2,000	0	0				2,470	C	0
Tájuddin	48	2	10	10	14	0				200	0	0				259	0	10
Zarghún Khán 🐭	160	15	4		ļ					800	0	0				460	15	4
Luni Khán	72	11	1							100	0	0				172	11	1
Bahmán Ján	51	0	11							100	0	9				151	0	11
Diwánah Khán	106	8	1	•••						400	0	9				506	8	1
Omah Khán							***			100	0	0		- 1		100	0	0
8hér Khán						,				100	0	0				100	0	0
Musamát Zalli										100	o	0				100	9	0
Musamát Zárngi				•••						70	0	0			-	70	0	0
Jamál Khán										50	0	0		-]	50	0	0
Total	889	1	8	10	14	0	20	9	0	3,520	0	0		-		4,439	15	8

Name of Receipients.	La Reve	nd	е.	Grazing Tax.			Water Mills.			Allo ces (com at A a Ma	va pu ns	n- lue cd	Αl	ash low oes	۲.	TOTAL.			
	Ra.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	P٠	Rs.	8.	p.	Rs.	a.	p.	
Hill Jogizais Mulla Muha mud, Rahim of Rod Jogizai Khande Khán and others of	7	15										•	•••			٥	ĮĎ	5	
Rod Jogízai	142	10	7		٠		•••	ļ	٠٠	*500	0	0	•••		•••	642	10	7	
Mitha Khél and Bostán Khél.				200	0	0										2 0 (0	0	
Total	150	10	0	200	0	0		ļ	Г	500	0	0				850	10	0	
GRAND TOTAL	1,297	G	1	210	14	0	35	0	0	70 2 0	0	0	250	0	0	8,818	4	4	

MISCELLA-NEOUS REVENUES Salt. The salt used by the indigenous population in the Zhob District is the earth salt made locally by the Lawanas, Mirzais, Jalálzais, and Daulatzais in the Upper Zhob subdivision. The method of its manufacture has already been described in the section on Mines and Minerals. This salt is not at present (1905) taxed, as its out-put is small and the cost and difficulties of collection are great. The alien population residing chiefly at Fort Sandeman and at other tahsil headquarter stations and out-posts use the Punjab rock salt which pays duty at the mines.

Opium.

The import, possession, and transport of opium and poppy heads is governed by rules issued by the Local Government in 1898 under the Opium Act. The cultivation of poppy is prohibited, and the supply required for local consumption is imported from the Punjab, under pass, by licensed vendors, who make their own arrangements for procuring it. Such imports pay no duty.

The exclusive right of rotalling opium, preparations of opium other than smoking preparations, and poppy heads

Only Khande Khan.

for ordinary purposes, is disposed of annually by auction by the Political Agent, subject to the sanction of the Revenue REVENUE. Commissioner, the number of shops at which sale is permitted, having been previously fixed. In 1904-5 the number of such shops was 11. Medical practitioners and druggists can obtain licenses to sell opium in forms other than smoking preparations, and poppy heads, for medicinal purposes only, on payment of a fee of Rs. 10 per annum. Smoking preparations may not be bought or sold, and must be made up by the smoker from opium in his lawful possession, and then only to the extent of one tola at a time. The ordinary limits of private possession are three tolas of opium and its preparations (other than smoking preparations), and one seer of poppy heads. In 1904-5 the consumption of opium amounted to 24 seers 9 chittacks and of nonny heads 2 seers. The revenue realised was Rs. 640.

Besides opium, the intoxicating or hemp drugs, which are Intoxicating controlled by regulations, are gánja, charas, and bhang. Prior to the time of the Hemp Drugs Commission, the only restriction imposed was to farm out, by annual auction, the monopoly of the vend of these drugs at shops sanctioned by the Political Agent. The local cultivation of the hemp plant was stopped in 1896 throughout the Province and the contracts for retail and wholesale vend were separated in 1902. At the present time (1905) the number of licensed shops is 11. The ordinary source of supply is the Punjab and Sind. In February, 1902, revised rules were issued. under which the farmers are permitted to import the drugs from other British provinces in bond; and these when so imported, are stored in a bonded warehouse established at Sibi, where small fees are levied and issues to licensed vendors are taxed. The ordinary rates* of duty on drugs imported from British territory are Rs. 4 per seer on gánia: Rs. 80 per maund on charas, and Rs. 4 per maund on bhang. but imports from foreign territory are taxed at double rates.

^{*} The question of the revision of these rates is under consideration (1908).

M 18-CELLANMOUS REVENUE. The contracts for the right to sell the drugs, both by retail and wholesale, are sold annually by auction by the Political Agent, subject to the sanction of the Revenue Commissioner, who also fixes the number of shops. The ordinary limit of private possession is one seer in the case of bhang, and five tolas in the case of $g\acute{a}nja$ and charas. The consumption in 1904-5 was charas 2 maunds 25 seers, and bhang 2 maunds 7 seers, while no $g\acute{a}nja$ was sold; the revenue amounted to Rs. 2,200.

Country spirits and rum. The manufacture and vend of country spirits and rum are combined under a monopoly system. The right to manufacture and sell country liquors including rum is farmed annually by auction, the number of shops at which liquor is to be sold by the farmer or his agent being fixed previously. The number of such shops in 1905 was 11. More than one seer of country liquor cannot be sold to any one person at a time, except with the permission, in writing, of an Excise Officer authorised on this behalf by the Political Agent. No minimum price is imposed nor has the liquor to be of any specified strength. The revenue in 1904-5 was Rs. 6,200 for country liquor and Rs. 610 for rum.

Distillation of country liquor.

The distillery at Fort Sandeman belongs to a private individual, who generally holds the contract for the vend of country liquors. The supply to out-stations is sent from Fort Sandeman. The materials ordinarily used in the distilling of liquor are molasses (gur) and kikar or babil bark. When preparing for fermentation, about 2 maunds of gur are mixed with ten seers of bark and 4 maunds of water, the wash being ready for use in about 12 days in summer and in about 16 days in winter. Liquor of low strength, obtained from the first distillation of 6 hours, is called kacha or chirakh. This chirakh after a second distillation, lasting for about 12 hours, is known as kora doátsha. Flavoured liquors are prepared by the addition of spices such as iláchi (cardamom), turanj (citron), guláb (rose leaves), saunf (aniseed), sund (dry ginger),

and gázar, or carrot seeds. The selling price varies from R. 1-2-0 to R. 1-4-0 per quart bottle according to the REVENUE. quality of the liquor.

MIS-CELLANEOUS.

> Foreign. liquors.

Foreign liquors, which term includes liquors other than rum manufactured in other parts of India and imported into the District, are sold under wholesale and retail licenses. which are granted by the Political Agent on payment of fixed fees. These amount to Rs. 32 per annum for wholesale licenses, and Rs. 150 per annum for ordinary retail shops. There are also dák bungalow licenses. The most important conditions of retail licenses are, that no quantity of liquor greater than two imperial gallons, or twelve quart bottles, or less than one bottle, shall be sold to any one person at one time, and that no spirituous liquor, except spirits of wine and methylated spirits, shall be sold for less than R.1-8-0 per The latter provision is mainly intended to safeguard the revenue derived from country spirits. During 1904-05 1 wholesale, and 3 retail licenses, including one for a dak bungalow, were issued and the fees amounted to Rs. 247.

The import, possession, and sale of methylated spirits is controlled by rules* issued by the Revenue Commissioner in December, 1900, and no fees are charged for licenses. such licenses have yet (1905) been issued in Zhob.

Methylated spirits.

The consumption of opium, intoxicating drugs and liquors Consumers, is chiefly confined to the Indian population at Fort Sande-consumption, man and other parts of the District; a small quantity of gate revenue. charas is also used by the Kandaháris engaged in melon growing at Fort Sandeman and Hindubagh. There is no consumption of these articles by the indigenous population.

Table XIX, Volume B, contains details of the consumption of, and revenue from, the principal articles in the old Zhob District from the year 1890-1 to 1902-3, and for the new District for 1903-4 and 1904-5. In 1904-5 the consumption per thousand of the entire population was -5 chittacks of opium, 1 seers of charas, and 11 seers of bhang.

[&]quot; Chapter III, Baluchistán Excise Manual, 1902.

Mis-Cellaneous Revenus. In the old District, the average revenue per annum from 1890-1 to 1902-3 was Rs. 15,274, the highest sum realised being Rs. 18,418 in 1901-2 and the lowest Rs. 11,624 in 1893-4. In the new District the revenue has been Rs. 9_{ϵ} 017 in 1903-94 and Rs. 9,897 in 1904-5.

Stamps.

The Indian Stamps and Court Fees Acts and the rules made under them are in force in the District. Licenses for the sale of judicial and non-judicial stamps are issued by the Political Agent to petition-writers and others, who obtain their supply from any of the Sub-treasuries at Fort Sandeman, Kila Saifulla, and Hindubágh, and are paid commission at rates varying from As. 12½ per cent. to Rs. 6½ per cent. on different kinds of stamps. In March, 1905, there were 8 licensed stamp vendors in the District. In 1904-5, the receipts amounted to Rs. 5,057 of which judicial stamps realised Rs. 3,892 and non-judicial stamps Rs. 1,165. The largest amount (Rs. 3,842) was contributed by the Fort Sandeman tahsil.

Income-tax.

The Income-tax Act (II of 1886) has not yet been applied to Baluchistán, but the tax is levied on the salaries of Government servants, by deduction from their pay bills; on the salary of officers paid from local funds and on rewards paid to military officers for passing examinations in Oriental languages. The receipts in 1904-05 amounted to Rs. 2,245.

LOCAL FUNDS. Besides the Zhob Police and Zhob Levy Corps Excluded Local Funds, which are maintained for the interior economy of these forces, the only local fund in the District is the Fort Sandeman Bazar Fund, which was formed into an Excluded Local Fundin 1892. It is governed by rules issued by the Government of India in February, 1900, as modified in April, 1902. The Political Agent is the administrator and controlling officer of the fund, and the Revenue Commissioner has the powers of a Local Government. The revenue is collected under the supervision of the tahsildar of Fort Sandeman who also incurs necessary expenditure

LOCAL FUNDS.

with the sanction of the Political Agent. The following are the principal sources of revenue:—(a) *Octroi, which is levied at Fort Sandeman and Hindubágh according to the schedule of rates sanctioned by the Local Government : (b) Public gardens and lands, and rents of serais and building; (c) Fees from educational institutions and grantsin-aid paid towards education from Provincial revenues; and (d) Conservancy cess levied at Fort Sandeman bazar. The right to collect octroi is farmed out annually by auction and one-third of the octroi receipts of Fort Sandeman bazar are paid to the military authorities for the conservancy arrangements of the Cantonment. The rates of conservancy cess vary: they are levied monthly at from R. 0-12-0 to R. 1-8-0 on a shop, Re. 0-4-0 to R. 0-8-0 on a dwelling house, and Re. 0-4-0 on a thara or shop frontage. The fund is expended on objects of public utility in the places from which the revenue is raised. The chief items of expenditure are those on establishment for conservancy, and watch and ward; the maintenance of gardens and arboriculture; contributions towards medical institutions; and the maintenance of schools with the aid given by the Provincial revenues. The average annual receipts for the five years ending the 31st of March, 1902, amounted to Rs. 15,793, and the expenditure to Rs. 15,336, while in the year 1904-5 the receipts amounted to Rs. 22,382 and the expenditure to Rs. 21,267. In this year octroi contributed 69 per cent. of the total revenue, and the expenditure on public instruction was over 9 per cent. The closing balance of the fund on the 31st of March, 1905, amounted to Rs. 10.477. Owing to the withdrawal of the cavalry regiment from Fort Sandeman, there will in future be a considerable falling off in the receipts of the fund (1906). Details

^{*} The schedule of rates and the rules which regulate the tax are embodied in a collection of printed papers entitled "The System of Levying and Collecting Octroi in Baluchistán, 1900." The rates were slightly modified subsequently.

of both income and expenditure are given in table XX,

PUBLIC WORKS.

Important civil works in the District are carried out by the officers of the Military Works Service. The Assistant Commanding Royal Engineer of the Loralai Sub-District with his headquarters at Loralai exercises general control and has under him two Garrison Engineers with headquarters at Fort Sandeman and Loralai. The civil works in the Fort Sandeman tahsil are under the Garrison Engineer. Fort Sandeman, who has a Sub-Divisional Officer in subordinate charge, whilst those in the Hindubágh and Kila Saifulla tahsils are under the Garrison Engineer, Loralai, who has a Sub-Divisional Officer at Kila Saifulla. Civil works which cost Rs. 1,000 and over are provided for in the Public Works Budget, and are generally carried out by the Military Works Services. Works of a petty nature, and those required in places remote from headquarters, are executed under the orders of the Political Agent. Civil works of this nature are supervised by an overseer assisted by a mistri, both of whom are paid from Provincial revenues. A Special Irrigation Engineer, with his headquarters at Quetta, advises the Local Government in all irrigation matters.

Important works. Reference will be found in the section on Means of Communication to the principal roads in the District and the survey for a line of railway carried out in 1891.

Pipe water supply at Fort SandeIn the early days of its occupation, the supply of water for drinking and other purposes was brought in an open channel from small springs in the Siliáza stream at a point about 8 miles to the east of Fort Sandeman. This water passed through fields, was muddy, and more or less in a contaminated state, and the watercourse which crossed the Siliáza stream at several points was liable to be breached by floods and the station water supply cut off till the channel could be repaired. Such a supply of water had its bad effects on the health of the troops, and a line of pipes of 3 inches internal diameter was laid down in 1894 from springs

near Kapip to Fort Sandeman, a distance of about 8 miles. The total cost amounted to Rs. 1,08,927, of which Rs. 30,000 were paid by the Military Department and the balance from Provincial revenues. The maintenance charges are also borne by the latter.

Public Works.

The water pipe which follows the general line of the nullah bed is liable to damage during heavy floods and on several occasions there has been a water famine in the station owing to this cause. The question of constructing a tank or reservoir to hold a week's supply of drinking water is now under consideration.

Besides the buildings in the military portion of the Fort Sandeman station, the principal buildings in the District are the tahsil, thána, civil dispensary, levy post and combined post and telegraph offices at Fort Sandeman, Kila Saifulla and Hindubágh (completed between 1890 to 1:00); houses for the Political Agent known as the "Castle" (1891) Assistant Political Agent (1892), Commandant, Zhob Levy Corps (1891), Adjutant, Zhob Levy Corps (1897), Extra Assistant Commissioner (1890), Political Agent's office clerks' quarters (1891), and a caravan serai at Fort Sandeman (1900), Jirga hall at Fort Sandeman (1902), and the Political rest house now occupied by the Extra Assistant Commissioner at Hindubágh. A list of the dák bungalows and rest houses in different parts of the district is given in table X. Volume B.

Levy posts, most of which are in charge of the civil officers for purposes of maintenance, have been built at Bábar, Bádinzai, Dahána Sar, Kashmír Kili, Khwárína, Lakaband, Lowara (Sarawakáni) Lawána, Máníkhwa, Mardánzai, Mína Bázár, Mír Ali Khél, Mughal Kot, Murgha, Shín-ghar, and Walla in the Fort Sandeman tahsil; at Bábu Chína, Hindubágh, Loe Band, Murgha Mehtarzai, Nisai, Shína Khora and Shamshob in the Hindubágh tahsíl; and at Kila Saifulla, Akhtarzai, Gwál Haidarzai, Kálu Kila, Barat Khél, Sábra, Tang Haidarzai, Musáfirpur, Tánishpa, Sharan

PUBLIC WORKS Bátozai, Kila S. B. Muhammad Akbar Khán, Kila S. B. Bangul Khán, Ali Khél and Alozai in the Kila Saifulla tahail.

The Zhob Levy Corps have, besides the headquarter lines at Fort Sandeman, posts at Khúni Burj, Mughal Kot, Girdáo, Gul Kach, Husain Nika, Gustoi, Sra Dirga. Sarantza, Kamr-ud-din Káréz, Késhatu, Tirkhawar, Ghazlúnawar, and Loeband. Repairs to these are arranged by the Commandant of the Corps, the funds being provided from the grants for Civil works.

ARMY.

The station of Fort Sandeman was first occupied in 1890 by one Native infantry regiment, a wing of cavalry which was subsequently raised to a full regiment, and 2 guns of a Mountain Battery. The guns were withdrawn in 1896 and the cavalry in October, 1905; the present garrison, therefore, consists (1906) of a regiment of Native infantry only. This regiment furnishes detachments at Drug, in the Músa-Khél tahsíl of the Loralai District, and at Máníkhwa (established in 1895) and Mír Ali Khél (1890). The infantry regiment stationed at Loralai supplies detachments for Hindubágh, Kila Saifulla and Murgha Kibzai (1889), while the cavalry regiment at Loralai also furnishes the detachment at Murgha.*

ZHOB LEVY CORPS. In August, 1889, the late Sir Robert Sandeman proposed the raising of a tribal levy to keep order in Zhob, to protect the country stretching from Pishin to the Gomal and to be a political aid to the officer in charge of the District. These proposals were sanctioned by the Government of India in December, 1889, and in February, 1890, Captain W.A.D. O'Mealy, 1st (P. A. V. O), Punjab Cavalry, was appointed the first Commandant. The strength of the Corps was fixed at 416 for cavalry and 526 for infantry, and the total cost at Rs. 2,47,316 per annum.

^{*} It is under consideration (1906) to withdraw regular troops from Manikhwa, Hindubágh, Kila Saifulla, and Murgha and to replace them by police and levies.

CORPS.

The composition of the Corps as originally approved was as Zhob Levy follows: - The cavalry (4 squadrons) was to consist of one squadron each of Zhobis, Ghilzais, Bráhuis and Baloch, and mixed Pathans and the infantry (5 companies) of 2 companies of Zhobis and one company each of Ghilzais, Achakzais, and mixed Patháns.

The first enlistments were made in Quetta in June, 1890, native officers having been selected by the Agent to the Governor-General. The men enlisted consisted of Brahuis refugee Ghilzais and miscellaneous l'athans, the total enlistments amounting to 200. The Corps was then ordered to Fort Sandeman, and within a few weeks took part in the Zhob expedition. On its return it was broken up into detachments and proceeded to garrison Hindubagh, Kila Saifulla, Bruni, and Safi. In 1892 it held 7 posts: Hindubagh. Gul Kach, Kuchbina, Safi towers on Mir Ali Khél road, Kingri, Rarkan, and Rakhni. In September. 1892, one Kákar company was abolished, which reduced the strength of the infantry from 526 to 421. The money so saved was utilized, among other things conducive to the efficiency of the Corps, in raising the pay of the sowars from Rs. 25 to Rs. 27 and of footmen from Rs. 10 to Rs. 11.

As it was found impossible to enlist Achakzais, a company of Bráhuis and Baloch was raised in place of the Achakzai company. A second British officer was added to the Corps in April, 1893, as 2nd-in-Command and Adjutant. Certain minor alterations made in 1895 placed the strength of the cavalry branch at 423 (Native officers 13, dafadárs 36. sowars including 2 salutris, 374) and of infantry at 421 (Native officers 9, havildars and naiks 40, and sepoys 372). In October, 1901, the Civil Surgeon of Fort Sandeman was placed in medical charge of the Corps and was granted an allowance of Rs. 50 per mensem. In the same year the post of Subedar-Major was abolished and an additional Subedar and a native adjutant were added. The total ZHOB LEVY CORPS.

strength of the Corps at this time consisted of 423 cavalry and 422 infantry, and the cost amounted to Rs. 2,67,199 per annum.

Meanwhile the duties of the Corps had considerably increased and as both the Wazir and Afghán borders had to be guarded, the number of outposts for which detachments had to be furnished had risen to 16. The Government of India, therefore, in March, 1904, sanctioned the addition of two companies of infantry and a third British officer as Adjutant to the Corps. The strength of the infantry section of the Corps was thus raised to 682, viz., Native officers 14, havildars and naiks 60, and sepoys 558, involving a total cost of Rs. 3,13,577 per annum.

In 1905, owing to the extended duties thrown on the Corps by the withdrawal from Fort Sandeman of the cavalry regiment hitherto stationed there, its strength was again augmented by the addition of another British officer and of 202 men of all ranks to the cavalry section of the Corps. The present cost of the Corps, therefore, is Rs. 4,00,381 per annum and its strength consists of 4 British officers 636 infantry (Native officers 13, havilders and naiks 62, sepoys 561) and 625 cavalry (Native officers 14, daffaders 52, sowars including salutris 559). The distribution of the Corps in various grades in June, 1905, is given in table XXI, Volume B. The question of the addition of another British officer to the infantry is underconsideration.

Since the Corps was first raised many changes have taken place from time to time in its composition. The present composition of the corps is as follows:—

Cavalry.

- 1 Squadron, Quetta-Pishín Kákars.
- 1 " Ghilzais.
- 1 , Bráhuis and Baloch.
- 1 " Zhob Kákars.

Infantru.

ZHOR LEVY CORPS.

- Company, Quetta-Pishin Kákars.
- 1 Ghilzais and Músa Khéla.
- 2 Zhoh Kákara.
- 1 Músa Khéls.
- 1 Isots.

Besides the headquarters at Fort Sandeman, the Corps has 14 posts in the District and a small detachment at Harnai in the Sibi District. The strength of each post in June, 1905, is shown in table XXII, Volume B. A redistribution of the posts has, however, been lately undertaken. Under this new scheme the posts at Shinbaz. Chachobi, Bruni, and Gudawana have already been abandoued, and the question of transferring Girdáo and Khúni Buri to the local levies is under consideration (1906).

The question of granting pensions was raised in 1897, but Good conduct the proposal was not sanctioned. From 1st April, 1899, the Government of India sanctioned the grant of good conduct pay to the members of the Corps at the rates prescribed for Native soldiers of the Indian Army. There has since been a considerable decrease in the number of desertions from the Corps.

allowances.

Up to February, 1893, the only kind of uniform worn by Uniform and the Corps was a lungi of Corps pattern, but after that date kháki uniform for all ranks was introduced, similar to that worn by Native regiments of the Indian Army. When first raised, the Corps were armed with Snider carbines and swords in the cavalry and Snider rifles and bayonets in the Infantry. In October, 1902, the Corps were re-armed with Martini-Henry rifles and carbines.

arms.

There is an Assámi fund both for cavalry and infantry Assámi fund. which consists of in the Cavalry :-

- (1) Clothing and equipment deposit, Rs. 20 for all ranks.
- (2) Amánat Kháta.—Rs. 40 for sowars; other ranks at the rate of 14 months' pay.
- (3) Chanda or horse price, Rs. 150.

ZHOB LEVY CORPS. These funds are maintained by monthly deductions from the pay of the men in the Corps. The system is the same as that which exists in the Native Silladar Cavalry by which every man owns and pays for his horse, clothing, and equipment.

Aminat Khata is a fund which enables the Corps to advance their pay to men going on furlough, leave, etc., and also to give men of good character and long service loans whenever they require money for private purposes.

As a rule a recruit who enlists in the cavalry is required to deposit from Rs. 30 to Rs. 50 in cash on enlistment, which is credited to his Assámi, the remaining portion of the Assámi is cut monthly from the man's pay at varying rates according to the rank of the man, and the price of provisions.

In the Infantry -

- (1) Clothing and equipment, Rs. 10.
- (2) Amánat Kháta, Rs. 15 for sepoys; other ranks at the rate of 1½ months' pay.

Corps funds.

The formation of the Zhob .Levy Corps Excluded Local Fund was sanctioned in August, 1891, and it then consisted of-(1) chanda; (2) clothing; (3) equipment; and (4) estates of deceased officers and men. In September, 1895, the fund was reconstituted and split up into two funds as follows:-(a) Government fund comprising chanda (Government), fines, estates of deceased officers and men; (b) private or Regimental fund comprising chanda (private), Amánat Kháta, forage, farm, clothing and equipment, store, hospital, and shoeing. The funds were ordered to be kept in the Government treasury. In May, 1899, rules for the audit of these accounts were framed, which, among other matters, provided that a Committee composed of the Political Agent, Zhob, as President, with the Commandant of the Corps and an officer of the Fort Sandeman garrison not below the rank of Captain as members should assemble twice a year (preferably in April and October) to examine both the Government and Private funds and to forward to the ZHOB LEVY Revenue Commissioner, through the Political Agent, Zhob. a return showing under each sub-head the funds to the credit of the Corps. The Committee were also to furnish a certificate as to the correctness of the return.

CORPS.

In 1904-5 the accounts of the two funds were as follows :--

Regimental Fund.

Receipts	•••	•••	•••	Rs.	3,28,871
Expenditu	re	•••	•••	,,	3,19,882
	Gov	ernmen	t Fund.		
Receipts	•••	•••	•••	Rs.	2,760

Expenditure 2,435

Many of the posts held by the Corps lie on the Afghan and Wazir border and the men, therefore, come frequently rendered by the Corps. into collision with parties of raiders from across the border. Among many instances of good service rendered the following may be mentioned :-

In September and October, 1890, the Corps took part in the Zhob expedition.

In August, 1892, a party of 1 daffadar and 7 sowars. when returning from Wano after delivering a letter to Sardár Gul Muhammad Khán, the Amír's governor, was attacked at the junction of the Toi and Gomal rivers by a party of about 60 Wazirs. These Wazirs had the previous day waylaid a patrol of a Native cavalry regiment near Mir Ali Khél, killing 3 men and 2 horses of the patrol. The party of the Zhob Levy Corps repulsed with loss the attack of the Wazirs. On the side of the Levies 2 men and 2 horses were wounded and 1 horse killed.

During 1901-2 a large portion of the Corps was employed on the Mahsúd Wazír blockade. They did good work and were frequently commended by Lieutenant-Colonel Scallon. D. S. O., C. I. E., in command of the troops on the Zhob side, for good work, and at the conclusion of the operations received the commendations of the Government of ZHOB LEVY India. Medals were subsequently, in 1904, given to the Corps engaged in the operations.

On 13th July, 1901, a party of Afghans crossed the border at Késhatu and carried off 380 camels, a number of donkeys and one man who was in charge. By the prompt action of Havildar Muhammad Bakhsh of the Zhob Levy Corps all were recovered.

On 30th August, 1901, a party of 4 sowars, under Ressaidar Mitha Khán, was attacked by Wazírs in the Khajúri pass. One sowar was killed, but owing to the gallant behaviour of Ressaidar Mitha Khán and the other 3 sowars, the Wazírs were unable to do any more damage, and the party got back to Gul Kach with the body of the sowar and his horse and weapons. For this they were thanked by the Liout enant-General Commanding the Forces, Bombay.

On 26th November, 1901, a band of Mahsúd raiders carried off about 1,000 sheep from near Mughal Kot. Owing to the promptness of Ressaidar Diwána Khán, who turned out quickly with his men, all the sheep were recovered.

The Corps was represented at the Delhi Coronation Darbár (1903) by Major C. W. Jacob, the Commandant; Resaldar-Major K. S. Muhammad Ismáil Khán, Bahádur; Ressaidar Mitha Khán; Subedár Mauladád; 13 cavalry and 33 infantry.

In 1902-3 the Corps acted as escort to H. E. Lord Kitchener, Commander-in-Chief in India, on his tour along the Afghán frontier from Hindubágh to Gul Kach, and won the commendation of His Excellency for the way they carried out the duty.

In April, 1905, a gang of transborder men, numbering about 60, attacked the Shinbáz post, killing 4 men and wounding the Havildár and 3 others. The small garrison acted with great gallantry and in recognition of their services Havildár Hyát Khán and sepoys Ali Ján and Sultán Khán were awarded the 3rd Class Order of Merit.

On the 13th December, 1905, a band of outlaws ZHOB LEVY from across the border attacked the post held by the Corps at Gudawana, killing 5 and wounding 3 men. For their gallant conduct on this occasion, Naik Amín Khan and sepoy Majid were awarded the 3rd Class Order of Merit.

CORPS.

During the visit of Their Royal Highnesses the Prince and Princess of Wales to Quetta in March, 1906, Risáldár-Major K. S. Sháhzáda Muhammad Ismáil Khán, Bahádur, Ressaidars Abdul Salam Khan and Mitha Khan of the Zhob Levy Corps acted as special orderlies in attendance on Their Royal Highnesses and were given special commemoration medals.

At various times the Corps has earned favourable reports from the high military authorities by whom it has been inspected.

The following officers have held the appointment of Commandant since the inception of the Corps in 1890 :-

Captain W. A. D. O'Mealy (1st P. A. V. O. Punjab Cavalry) from the 3rd February, 1890, to 19th February, 1892.

Captain W. W. Norman (2nd Punjab Cavalry), 20th February, 1892, to 16th December, 1897.

Lieutenant F. D. Henslowe (2nd Punjab Cavalry, appointed Adjutant and 2nd-in-Command, 23rd December, 1892), 17th December, 1897, to 26th March, 1898.

Major W. G. Alban (26th Baluchistán Regiment), 26th March, 1898, to 29th May, 1900.

Captain Henslowe, 30th May, 1900, to 31st July, 1900.

Captain C. W. Jacob 1st August 1900, to 30th September, 1904.

Major R. E. Roome, 1st October, 1904, to 31st October, 1906.

On the formation of the Zhob Agency and the transfer to it of the Bori and Bárkhán tahsíls, the levies serving in

LEVIES.

LEVIES.

those taheils and costing Rs. 6,381 per mensem, were transferred from the Thal Chotiáli to the Zhob District.

In December, 1889, the Government of India allotted a sum of Rs. 25,000 per aunum which was divided into the following services:—Abdullazais, per mensem Rs. 475; Mando Khéls, Rs. 455; Bábars, Rs. 205; Khostis, Rs. 40; Musa Khéls of Toi, Rs. 55; Zalli Khéls, Rs. 500; Ismáilzais, Rs. 105; Haidarzais, Rs. 105; Postal levies (Pákhézai Abdullazais), Rs. 130.

In August, 1890, a further sum of Rs. 25,000 was sanctioned for levies for the work of administration, realisation of revenue and the prevention and detection of crime in Central and Upper Zhob. This sum was distributed monthly as under-Shamozais, Rs. 465; Bráhimzais, Rs. 480; other Alizai tribes, Rs. 695; miscellaneous Zhob tribes (Barat Khéls. Sibzais, Lawánas, Sargara, and Mehtarzais), Rs. 420; Rs. 80 were also sanctioned for a Murgha and Hindubágh Postal Service and the Bargha Shíráni Service costing Rs. 640 per mensem was in 1890-1 transferred to the Zhob District from the Deráját when the Bargha section of the Shiránis was placed under the jurisdiction of the Political Agent, Zhob. A service costing Rs. 565 per mensem was also sanctioned for Drug. The Garáni levies brought to Zhob from Thal Chotiáli continued to be paid by the latter District up to March, 1893, when a service of 2 daffadars and 10 sowars, costing Rs. 310 per mensem, was sanctioned for them from Zhob revenues.

In April, 1893, the total cost of the Zhob levies was Rs. 12,142-10-8 per mensem as detailed below. Of this amount, Rs. 7,184-5-4 were paid from the special allotment for Police and Levies and Rs. 5,008-5-4 from Zhob revenues:—

Rs. a. p.
Postal service, Loralai to Kingri ... 256 0 0
Khétrán service 975 0 0

			Rs.	a.	p.	LEVIE
Zhob Kákars	•••	•••	910	0	0	
Frontier road levies	•••	1	,155	0	0	
Telegraph service	•••	•••	200		0	
Ghilzai service	•••	•••	670	0	0	
Bargha Shíráni servico	•••	•••	640	0	0	
Mando Khél service		2	,083	5	4	
Mixed posts, Punjab fro	ntier		245		0	
	TotalF	•		- 	4	
Di 1i		_	Rs.	a.	p.	
	***		,150	0	0	
New Khétrán service	•••	•••	820	0	0	
Murgha-Hindubágh Po	stal levic	98	80	0	0	
Drug levies	***	•••	565	0	0	
Central and Upper Zho	b levies	2	880,	5	4	
Garúni service	•••	•••	310	0	0	
	Total1	Rs. 5	.008	5	4	

The total strength of the District levies, excluding the Postal sowars was 480 and comprised 1 inspector, 1 thanadúr, 17 jemadúrs, 81 daffadúrs, 286 sowars, 24 footmen, and 20 vernacular clerks.

In March, 1894, increases amounting to Rs. 372 per mensem were sanctioned, which included a Músa Khél Postal service (Rs. 165) and a Lawína service Rs. 160 per mensem. In 1895 the Ghilzai and Frontier Levies were reduced by Rs. 325. In 1896 the Levy service was reorganised: levies costing Rs. 1,265 employed in Bárkhán and Bori were re-transferred to the Thal Chotiáli District; a service was provided for the Mirzais (Rs. 145), Jalálzais (Rs. 165), and Mardánzais (Rs. 300) of Khurásán; and increases and decreases were made in nearly all services. According to the revised scheme sanctioned in November, 1896, the cost of

LEVIES.

the levies was reduced to Rs. 11,332-10-8 per mensem. The levy service was not, however, found sufficient for the requirements of the District and further increases were sanctioned in 1897 at a monthly cost of Rs. 1,104 and Rs.,152 in 1899. In 1900—2 petty changes occurred and in the latter year the Postal and District levy services were separated, the cost of the former being Rs. 1,388 and of latter Rs. 10,739-10-8 per mensem.

The formation of the Loralai District in 1903, and the transfer to it of the Músa Khél and Bori tahsíls from Zhob necessitated a re-distribution of the lovies, and levy services, costing Rs. 8,453-1-4 per mensem were apportioned to Zhob, the details of which are as follows:—

Postal Services.

				Rs.	8.	p.
(1)	Loralai-Hindubágh	lino	•••	415	0	0
(2)	Loralai-Fort Sandem	an l	ino	605	0	0
(3)	Fort Sandeman-Muse	a Kh	él line.	85	0	0
		Tota	al…Rs.	1,105	0	0
	District	Lev	ies.			
				Rs.	a.	p.
(1)	Zhob Kákars	•••		701	13	4
(2)	Ghilzai service	•••		170	0	0
(3)	Bargha Shiránis		•••	1,357	0	0
(4)	Mando Khél service	•••	•••	8 3 0	0	0
(5)	Central Zhob levies	•••	•••	1,019	0	0
(6)	Upper Zhob levies	•••		715	0	0
(7)	Watering allowance,	levy	line-			
	Fort Sandeman 1	Rs,	4-0-0			
	Mir Ali Khél Thána	,,	1-8-0			
				5	8	0
(8)	Lawánas	•••		170	0	0
(9)	Mirzais	•••	• •••	185	0	0
(10)	Jalálzais		•••	160	0	0

				Ŕs.	a.	p.	Levies.
(11)	Mardánzais	***	***	260	0	0	
(12)	Kibzai service	•••	•••	730	0	0	
(13)	Shin-ghar service	•••	•••	103	0	0	
(14)	Headquarter levies	•••	•••	402	0	0	
(15)	Pay of clerks	•••	•••	505	0	0	
(16)	Fixed contingencies	•••	•••	34	12	0	
		Total.	Rs.	7,348	1	4	

The total strength of the levies in June, 1905, was 384, consisting of 63 headmen and chiefs, 72 officers, 199 sowars, 27 footmen and 23 clerks and menials. They are stationed in 39 posts and distributed over Hindubágh (57 men), Kila Saifulla (105 men) and Fort Sandeman tahsíl (222 men). Details of distribution are shewn in table XXIII, Volume B. A scheme for revision of levies is now (1906) under consideration which involves an additional cost of Rs. 1,278 per mensem. The additions include 1 thánadár, 4 daffadárs, 28 sowars, 4 havildárs, 42 footmen, and 4 muharrirs. The additional levies are distributed among Shíránis (Rs. 425), Mando Khéls (Rs. 490), Kibzais (Rs. 225), and muharrirs, etc. (Rs. 138).

The levies are employed not only in guarding passes and roads, but in the investigation and detection of crime in places other than the Fort Sandeman Civil and Military stations and the bazars at Hindubágh and Kila Saifulla. The principles of the levy system which were laid down by the Committee which assembled at Quetta in 1883, under the presidency of Sir Robert Sandeman, are observed. Those principles were —(1) that all persons drawing pay, whether chiefs or others, who were not pensioners, must render an equivalent in service; (2) that levies should be local, and tribal responsibility enforced; and (3) that the chiefs nominating and the men nominated should, as a rule, belong to the immediate neighbourhood of the post in which

they are employed. In pursuance of these principles LEVIES. service is given to chiefs or headmen in localities where they have influence and they can nominate their own men, subject to confirmation by the Political Agent or by the officer in charge of a sub-division. A nominee of a chief or a headman may be rejected on the score of physical unfitness, bad character, or other sufficient cause. The men bring their own weapons of some sort and the sowars their own mount, the latter being subject to approval.

service.

Zhob Kaka On the conclusion of the Zhob expedition of 1884 a service of Rs. 910 per mensem was sanctioned for the Zhob Kákars and was distributed as follows: -Músa Khéls, Rs. 65; Kibzais, Rs. 55; Shahbaz Khan Jogizai, Rs. 315; Shingul Jogizai Rs. 315; Mírzais, Rs. 60; Saifulla Khán, Rs. 100. This service then formed part of the levies of the Thal Chotiáli District. The distribution of the service was modified subsequently and at the time of its transfer from Thal Chotiáli to Zhob. Rs. 100 per mensem were paid to each of the four leading men, viz., Sardár Shingul Khán, Sardár Shahbáz Khán, Saifulla Khán and Mastak Khán, and Rs. 510 per mensem to 14 other men of influence. At present (1906) the amount paid is Rs. 701-13-4 per mensem to the following:-S. B. Muhammad Akbar Khán Jogízai, Rs. 100; Kalla Khán Jogízai, Rs. 120-13-4; S. Zarghún Khán Jogízai, Rs. 70; Ayúb Khán Jogízsi, Rs. 20; Said Khán Jogízai, Rs. 30; Lúni Khán Jogízai, Rs. 20; S. B. Nawáb Bangul Khán* Jogízai, Rs. 100; Bátal Khán Joízai Rs. 15; Báz Khán Jogízai, Rs. 15; Oma Khán Jogízai Rs. 25; Shér Khán Jogízai, Rs. 25; Musammát Zallai Jogízai, Rs. 10; Musammát Zárngi Jogízai, Rs. 6; Musammát Kamína and Fátma Khoidádzai, Rs. 25; Bárán Khoidádzai, Rs. 25 : Jamál Khán Bátuzai, Rs. 30; Pai Gul Jalálzai, Rs. 10; Khande Khán Jogízai, Rs. 45; and Mir Aslam Jogizai, Rs. 10.

^{*} The question of the continuance of this allowance to the sons of the late Nawab Bangul Khan is under consideration.

In addition to this a sum of Rs. 150 is sanctioned for Sardár Bahádur Muhammad Akbar Khán for 1 daffadár, 5 sowars, and 1 muharrir, and a sum of Rs. 80 for Sardár Bahádur Nawáb Bangul Khán for 3 sowars and 1 muharrir.

The posts held by Afghan troops in March, 1905, along Transborder posts.

Zazha		•••	•••	3 0	mon
Kasak	•••			5 0	"
Kázha Ba	ll	•••		50	,,
Tarwa Ta	rak	•••		49	,,
Kajir Ch	íh			25	,,
Gharlund	ai			20	,,
Ispinki C	háh	•••		15	,,
Matra or	Sohak	Khandi		30	,,
Kila Rasl	ıíd	•••		54	,,
Warsak		•••	•••	47	,,
Shinhai c	r Ila J	lirgah	•••	44	٠,,
Shádi Kh	ák	•••		43	. ,,
Uzhdasar		•••	•••	. 13	,
Prékari		***		2 0	٠.,

A police force was sanctioned for the District in 1890, which consisted of 4 Deputy Inspectors, 31 sergeants, 76 constables, and 30 daffadárs and sowars; the sanctioned cost being Rs. 2,514 per mensem. The police together with the Levies of the District were placed under the charge of the Assistant Political Agent at Fort Sandeman who was appointed ex-officio District Superintendent of Police; and the Political Agent ex-officio Deputy Inspector-General of Police.

One Deputy Inspector and 50 men of all ranks were received from the Thal Chotiáli, and 22 men from the Quetta and Pishin Districts on transfer owing to reductions in the forces of those districts, and the remainder were enlisted locally, bringing the establishment almost up to its sanctioned strength towards the close of the year.

LEVIES.

POLICE.

Police. Additions and alterations have been made from time to time in the force.

In 1892 one Inspector, 1 Deputy Inspector, 8 sergeants, 36 constables, 5 sowars (trackers), and 13 menials were added. In 1894 the appointment of 1 Deputy Inspector was abolished, an extra daffadár was added, and the pay of certain grades was modified; the Barkhan thana was also transferred to the Thal Chotiáli district. In 1896, when the charge of levies and police was separated, an office establishment consisting of 2 clerks, 4 menials (cost Rs. 144-8-0 per mensem) was sanctioned for the Assistant Political Agent, Lower Zhob, at Fort Sandeman (as District Superintendent of Police) and 1 sergeant, 5 constables and 5 sowars were added for escort and guard duty. In 1897, 1 Deputy Inspector, 4 sergeants, and 18 constables were added. In 1901 the chaukidárs employed in the Fort Sandeman bazar and paid from the Town fund were amalgamated with the police, and the fund contributes monthly Rs. 188-5-4 for the service of 1 sergeant and 12 constables. The police were again revised in 1903, when 3 DeputylInspectors, 8 sergeants, 27 constables, and 5 mounted men were added.

From time to time it has been held that the proper agency for the detection of crime in the District was the local headman and the levy, rather than the 'foreign policeman, and that the system of tribal responsibility should be more generally extended. In April, 1902, an order was issued by the Agent to the Governor-General in which it was laid down that it was the duty of all lambardárs or headmen to keep a watch on their villages, and to report the misconduct of any one or the advent of any suspicious person; it was also their duty to detect crime, and when cases were taken up by the Government, to help in their detection by giving direct information or furnishing clues. The headmen were also to be held responsible in case of the tracks of thieves not being traced beyond their villages. In 1908,

the police force was reconstituted, and it was decided that the investigation and detection of crime should, in future, be more largely entrusted to levies, and that except in the large towns and bazars, the duties of the police would be more especially confined to guards and escort duty. Cases of crime both in bazars and in the District are investigated by the Deputy Inspector of Police. In the former case he is assisted by the regular police and in the latter by Tribal levies. The police force was up till 1903-4 under the charge of the Assistant Political Agent at Fort Sandeman as ex-officio District Superintendent of Police, when the combined charge of the Zhob and the Loralai police was entrusted to an Assistant District Superintendent deputed from the Sibi District. Proposals are, however, under consideration (1906) to provide a permanent European police officer for the District and to increase the police force by an additional monthly cost of Rs. 1,618-13-10 per mensem.

On the 31st of March, 1905, the police force of the District, excluding the men employed in the tahsils transferred to the Loralai District, totalled 194, and included an Assistant District Superintendent of police, 1 Inspector, 7 Deputy Inspectors, 34 sergeants, 25 mounted men, 115 constables, and 11 miscellaneous and menials.

They were distributed as under-

Guards, escorts, and miscellaneous duties, in-

cluding reserve			***		125	
Fort Sandeman	thána	•••		•••	41	
Kila Saifulla	•••	•••	•••	•••	13	
Hindubágh			•••	•••	12	
Mir Ali Khel	•••		•••	•••	2	
Mughal Kot		•••	•••		1	

Details of the distribution are given in table XXIV, Volume B.

The police are enlisted from Punjábis, frontier and local Patháns, and other inhabitants of India. Every endeavour to enlist local men is made, but in March, 1905, the number POLICE.

Total strength.

System of recruitment and training.

280

POLICE.

of local men was only 5 per cent. of the total strength, such men are, however, more willing to join the mounted police and in that branch they prove useful. For purposes of training, the experiment is being tried of sending men to the Punjab Police Training School. A system was infroduced in 1901 under which classes are held in the lines and thánas daily, and instruction imparted in Punjab police and local rules, police catechism and certain law books: the men are periodically examined.

Educated people have not in the past readily taken service in the police, though an improvement in this direction is now observable.

Measures prove the police, etc.

Measures have been taken from time to time to taken to im- improve the pay of the various grades. The revision status of the which was sanctioned in 1903 provided local allowances certain posts of Deputy Inspectors and for all trackers; an increase from Rs. 17 to Rs. 18 in the pay of sergeants of the second grade; and the reconstitution of the proportions of the various grades of sergeants and constables, so as to give a fairer scale and quicker rate of promotion.

The rules regarding finger prints laid down in Punjab Government Resolution No. 1998, dated the 3rd of September, 1903, were adopted in 1905 for taking the finger impressions of pensioners, but systematic measures for the identification of criminals by finger prints have not yet been introduced.

Arms.

The Police have hitherto been armed with Snider rifles and side-arms, but the substitution of bored-out Martini-Henry rifles has been sanctioned, and the rearmament is being carried out (1906).

Cognizable cri me.

Table XXV, Volume B, shows the details of cognizable crime for the old Zhob District from 1898-9 to 1902 (both inclusive) and for the new District for 1903 and 1904. The average number of cases reported annually during the former period was 177, and the average number of con-

Annual

victions 119. The following table shows the classification Polices. of cases:—

			A	verage.
1. — Offer	ices against the S	tate, publ	ic tran-	
(quility, and justice	• •••	•••	2
II. — (1)	Murder	•••	•••	6
(2)	Attempt to mur	der	•••	1
(3)	Other serious of	fences age	ainst th	10
	person	• •••	•••	7
III Ser	ious offences agair	st proper	ty and	
1	person or against	property	only	20
-	nor offences again		-	
	er minor offences.		•	112

During 1904 the number of cases reported was 68 and the percentage of convictions was 94. Of the total number of cases reported during this year 54 were miscellaneous, 6 minor offences against property, 3 serious offences against property and person or against property only, 2 of murder and 1 each of — (a) offences against the State, public tranquility, and justice; (b) attempt to murder; and (c) other serious offences against the person.

It must be borne in mind that the above figures mainly indicate the state of crime in the towns and bazars. No criminal classes exist among the indigenous population and almost all offences such as theft and burglary are committed by outsiders.

Crime in the towns and bazars is largely committed by Crime in the Kandahári and Punjábi bad characters who open small shops in the bazar, or take service among the followers of a regiment.

Trackers are much used. It has been a matter of much Trackers. difficulty to get competent men. Trackers from the Punjab will not serve in a frontier district like Zhob, but the recent employment of local Pathans as such has been very successful.

POLICE.

Remarkable crimes. outrages.

The most notorious crime perpetrated since the occupation of the District was a series of outrages committed, in 1895. on the Dahána road by a band of Bargha Shíránis. Dahina road outrages were the outcome of the abduction by certain Khiddarzais on the 30th June, 1894, of a Chuhar Khél woman of Loars in Bargha. The case had been tried by a jirga, but the long delay in settling the case wore out the patience of the Chuhar Khél Shíranis of Loara and on the 6th June. 1895, eight young men of the Loara village under the leadership of a man named Shikari, proceeded to Manikhwa, where was the camp of Lieutenant Home, R. E., the officer in charge of the construction of the road. The Zhob Levy Corps guard was taken by surprise, of whom three were killed on the spot and all the six rifles with ammunition were seized. The camp was next attacked. Four coolies and one munshi were killed, and all the tents, etc., were set on fire. They also took an express rifle and a shot gun from Lieutenant Home's tent and killed one of his ponies. After this they proceeded down the road towards Dahána Sar, and meeting Lieutenant Home's khansamah, killed him and the camel on which he was riding. A little further on they met Lieutenant Home himself on his way back from Dahána Sar, and shot him from an ambush, afterwards killing his horse also. Somewhat further on they met a party of a naik and three sepoys of the Zhob Levy Corps. The naik was treacherously murdered and his rifle secured. About midnight the party arrived at the Dahána Sar Bungalew and killed there five persons, including a girl. Seven others were wounded. In addition to the above they killed some cows and calves and sheep on the road and at Dahána Sar. Troops were promptly sent in pursuit and on the evening of the 9th, a party under Captain McConaghey, Assistant Political Agent, came across the gang at dusk between Loara and Dahána Sar. Shots were exchanged, one sepoy of the 40th Patháns being killed and Shikári wounded. The murderers eventually succeeded in making their way

POLICE.

to Kandahár in the Amir's territory. Several of the Chúhar Khéls of Loara were convicted of complicity and sentenced to various terms of imprisonment. Fines aggregating Rs. 4,250 were imposed on the Bargha Shíránis, and Rs. 2,000 on certain sections of Mando Khéls and Harípáls who had allowed the murderers to pass through their districts. A punitive post was placed at Loara and the Harípál village of Devalgadh was deprived for two years of the privilege of freedom from revenue. A fine of Rs. 100 was also imposed subsequently on certain sections of the Largha Shíránis for harbouring the gang while in the hills. One of the murderers was afterwards captured in November, in a Shíráni village, tried and sentenced to death. Shikári, the head of the gang visited the Shíráni country again in 1904 and committed another murder.

The District possesses 14 cattle pounds, which are located Cattle pounds at Fort Sandeman, Mír Ali Khél, Mughal Kot, Hindubágh, Kila Saifulla, Lakaband, Máníkhwa, Dahána Sar, Murgha Kibzai, Murgha Mehtarzai, Bábu Chína, Akhtarzai, Gwál Haidarzai, and Musáfirpur. The first five are managed by the police and the remainder are under the charge of levy muharrirs and patwáris. Fines are levied at rates which vary from one anna per day for a sheep or goat to eight annas per day for a camel, in addition to which, feeding charges are also imposed. The receipts are credited to Provincial revenues from which the charges for maintenance are also met.

The subsidiary jails at Fort Sandeman, Hindubágh, and Jails. Kila Saifulla possess respectively accommodation for about 70, 45, and 20 prisoners. Convicts, whose term of imprisonment does not exceed 6 months are detained in these jails. Those whose term of imprisonment exceeds this period are sent to the Quetta jail whence prisoners with long sentences are transferred to the Shikárpur jail. Juvenile prisoners are also sent to the reformatory at that place. Prisoners in subsidiary jails are employed in grinding corn for their own food and on work in the public gardens and roads.

JAILS.

During 1904-5, the total daily average number of prisoners was 61, males 57, females 4, and the total expenditure on establishment and contingencies amounted to Rs. 3,198. The number of prisoners in the jails on March 31st, 1905, was 73, of whom 61 were males and 12 females.

There is no lunatic asylum in the District, and such lunatics as are required to be detained in an asylum are sent to Hyderábád in Sind, through the Deputy Commissioner of the Upper Sind Frontier at Jacobábád.

EDUCATION, Early methods.

Before the British occupation no system of public instruction existed. Mullás taught the Korán by rote to boys, and such men as aspired to a more extended knowledge of Muhammadan theology and law, had to spend some years in Kandahár in prosecuting their studies. Mullás charged no tuition fees, but were maintained by the zakát subscribed by the villagers generally one-tenth of the produce of the lands and one-fortieth of the flocks, which every Muhammadan is required to set apart for charity, and also by alms given on various occasions and by marriage fees. This system is still maintained in many places in the District, and a rough estimate shows that in 75 such institutions about 348 boys were under instruction in 1903.

Growth of schools.

There are (1905) in all four primary schools in the District: a boys' school (established 1892), and a girls' school (1896) at Fort Sandeman, and boys' schools at Kila Saffulla* (1894) and Hindubágh (1895). The schools at Fort Sandeman are maintained from the Bazar fund aided by Provincial revenues, while those at Kila Saifulla and Hindubágh are almost entirely kept up from Provincial revenues. In March, 1905, the girls' school had 17 pupils, and the boys' schools 56, of whom 25 were local Patháns. The total expenditure during 1904-05 was Rs. 1,891, of which Rs. 960 were paid from Provincial revenues, Rs. 584 from Local funds and the balance was realised from fees and private subscriptions. Detailed statistics for each school are given in table XXVI, Volume B.

^{*} The school at Kila Saifulla has since been temporarily closed (1906).

The schools at Fort Sandeman are managed by committees EDUCATION. composed of representatives of the various native communities with the Political Agent as President. Tuition fees are Miscellaneous. levied in the Fort Sandeman boys' school, but in Hindubagh and Kila Saifulla only an admission fee of annas four is levied from a boy on his first joining the school.

Since 1903, an appointment of Inspector-General of Education has been sanctioned for the North West Frontier Province and Baluchistán, and a personal assistant to the Inspector-General of Education has since been stationed at Quetta. The latter is in charge of all the schools in the District and pays occasional visits of inspection and advises the Political Agent on all points connected with the schools.

A public library was established at Fort Sandeman in June, 1893, and is located in a portion of the Jirga Hall built in 1902. It has three classes of members, the rates of monthly subscriptions varying from four annas to one rupee; and receives a monthly contribution of Rs. 15 from the Local funds. In March, 1905, the library had 60 members and possessed 467 English and 355 Vernacular books, and subscribed to 15 papers and periodicals.

The District possesses 3 civil dispensaries and a zanána MEDICAL. hospital, of which one dispensary and the zanána hospital are located at Fort Sandeman, and the other two dispensaries at Hindubagh and Kila Saifulla. The Military Hospital Assistants at Murgha Kibzai and Mír Ali Khél outposts are paid from Provincial revenues a monthly allowance of Rs. 5 each for services to the civil population. Separate statistics for each of the civil dispensaries are given in table XXVII. Volume B. The Principal Medical Officer is the Agency Surgeon at Quetta, who is also the Administrative Medical Officer of the whole Province. Military The senior Medical Officer at Fort Sandeman, who is ex-officio Civil Surgeon and receives a monthly allowance of Rs. 100 from Provincial revenues, supervises the civil dispensaries of the District.

Libraries.

WEDSCAL.

Fort Sande-

sary.

This dispensary was established in November, 1890. and a building for it was erected in 1891-2, which can accommodate 24 indoor patients. The dispensary is in man dispen- charge of a Hospital Assistant who receives an allowance of Rs. 10 per mensem from the Bazar Fund for sanitary work and Rs. 10 per mensem from Provincial revenues for police work. The cost is met from Provincial revenues except a ward servant on Rs. 10 per mensem who is paid from the Bazar Fund. In 1904 the total number of in-patients treated was 387 and of outdoor patients 19,506 while 665 operations were performed.

The Dufferna Dispensary. Fort Bandeman.

On the representation of Captain Macdonald, Political in Fund Zana- Agent, the Central Committee of the Countess of Dufferin Fund agreed to open a branch dispensary at Fort Sandeman and to meet the expenses a monthly grant of Rs. 100 was sanctioned from Provincial revenues, and Rs. 25 from the Bazar Fund. The balance is met by private subscriptions and by the Countess of Dufferin Fund. The dispensary which has accommodation for 6 in-patients was opened in May, 1899, and since then has been in charge of a qualified lady doctor, a trained dii is also kept who is paid from the Bazar Fund. During the first year (ending with March 31,1900) the dispensary did very useful work and was much appreciated. In all 5,694 patients attended the hospital, out of which 2,288 belonged to the town of Fort Sandeman and 3,406 were country people and Powindahs. Ten major operations were also performed by the lady doctor. In 1904, 33 in-patients and 3,124 out-patients were treated and 169 operations performed. In her report for the year the lady doctor in charge remarked that "with few exceptions all the parda nashin women in Fort Sandeman attended the outdoor dispensary regularly, and the country people also appreciate the hospital and come from long distances for attendance,"

Hi ndu bágh and Kila Saifulla dispensaries.

These dispensaries were opened in 1893. The establishment of each dispensary consists of a Hospital Assistant and a hospital servant and the cost is paid from Provincial MEDICAL. revenues. The Kila Saifulla dispensary has accommodation for 4 and Hindubágh for 6 in-patients. The number of in-patients treated in these dispensaries in 1904 was 112, and of out-patients 15,962.

The principal diseases are malarial fever, ulcers and Principal skin diseases, diseases of the respiratory and of the digestive diseases and their causes. systems. The excessive cold in winter causes attacks of pneumonia, catarrh, bronchitis, and frost bites. The total number of 35,967 indoor and outdoor patients treated in the three civil dispensaries in 1904, included among other minor ailments 9,624 or 27 per cent, of malarial fever. 323 of venereal diseases, 1,786 of diseases of the eye 3.346 of diseases of the respiratory system, 6,275 of diseases of the digestive organs, 6,270 of ulcers and other skin diseases, 1,422 of injuries and 1,694 of rheumatic affections.

In his medical report for the year 1904 the Agency Surgeon records that in Baluchistán, malaria is "at once the greatest primary cause of illness, and indirectly gives rise to a large proportion of the ill-health expressed in other terms." The Civil Surgeon of Fort Sandeman attributes the prevalence of malarial fever to the mosquitoes which abound in small collections of water in irrigated lands and at the edges of streams where the rate of flow is slight. Eye diseases are brought on by high winds, dust storms and flies. and also by the personal uncleanliness and dirty habits of the people, to which latter cause also the frequency of ulcers and skin diseases is mainly attributable. Great diurnal variations of temperature in winter, insufficient clothing and dry climate and winds causing rapid evaporation from the surface of the body result in diseases of the respiratory system; while diseases of the digestive organs are due to the stale and improperly cooked food and half-cooked meat eaten by the people. The severe cold in the Hindubágh tahsíl is responsible for the rheumatic affections.

M MDICAL.

Cholera.

There was a wide-spread outbreak of cholera in 1891 in nearly the whole of the Baluchistán Agency. It started from Sibi and Mudgorge, and was brought to Central Zhob by coolies from the Mudgorge railway works. This was followed by another outbreak in April, 1892, in the Gomal pass whence it spread into the Zhob District, when 92 deaths were recorded out of 109 seizures. In the summer of 1900 cholera again broke out and about 400 deaths occurred in the old Zhob District. Fort Sandeman town and the Apozai village suffered severely.

Writing in connection with the outbreaks of cholera in 1891 and 1892 the Agency Surgeon, Surgeon-Major J. C. Fullerton, I. M. S., said:—

"The history of these two outbreaks of cholera closely resembles that of others already recorded in former years. The disease generally first appears among the people living on the Bolán or Nári systems of water-supply, which consist of exposed surface irrigation streams easily susceptible of pollution and infection, or it suddenly breaks out among workmen who are dependent on open, exposed streams for their watersupply. The disease is then carried from one exposed watersupply to another, and as these supplies are often limited in number and far apart, and, as the travellers generally march long distances to their homes, infection is quickly and widely spread in all directions. In my opinion all open, exposed streams, especially those on the line of frequented roads or kúfila tracks, are never safe as they are always exposed to pollution and infection from many sources. The only extensive and sudden outbreaks of cholera we have had in the last fifteen years in Baluchistán have occurred in villages or collections of men congregated along open streams; while, on the other hand, towns, villages, and other communities, supplied with water taken direct from springs, artesian wells, or deep kárézes, which are not susceptible of pollution or infection, have never developed cholers to any great extent." *

^{*} Baluchistan Agency Administration Report for 1892-3, pp. 183-84.

There were four deaths from typhus in Kákha village of MEDICAL the Fort Sandeman tahsil in 1908-4. In the beginning of Typhus. 1904-5 this fever broke out in the Kila Saifulla lock-up whence it spread to other parts of the tahsil; 28 persons including 4 prisoners died from the disease. There were some 9 cases at village Pasha in the Hindubágh tahsíl, out of which one proved fatal. A case at Fort Sandeman proved fatal in February, 1905. There were also 3 cases of typhoid at that place out of which one proved fatal: 15 persons succumbed to this disease in the year 1900, in some villages of the Upper Zhob Sub-Division.

Influenza assumed an epidemic form in 1891. It com-Influenza. menced at Quetta whence it spread in March and April visiting Kalát, Loralai, and Zhob in succession. The disease was very general, the attacks were severe and the constitutional disturbance considerable. The mortality was, howeversmall. A slight return of the disease in a mild form occurred in September and October.

Both small-pox (kawai) and measles (sharrai) appear Small-pox. to be endemic. In May and June, 1900, the Kila Saifulla tahsil suffered heavily from a visitation of small-pox and again in the beginning of 1903. The prevalence of the disease is said to be greatly due to the local practice of inoculation.

Vaccination is optional, and in the greater part of the Vaccination and inocula-District inoculation is still in vogue. The advantages of tion. vaccination are, however, beginning to be appreciated, and in 1903, 4,419 successful operations were performed in the old District, while the number of such operations in 1904 in the new District was 1.069.

Inoculation, which is locally called rag, is practised by mullds, Saiads, and other persons of religious sanctity, whose services are requisitioned when an outbreak of smallpox occurs, and who are paid a small fee as an offering in cash or kind. Certain persons are generally considered specialists in the art. The method usually adopted is for a

MEDICAL.

small incision to be made with a razor on the wrist of the right hand, in which lymph obtained from the pustules of a person suffering from the disease is inserted, together with a grain of wheat or juári. The patient is then segregated, and is only visited by persons who have themselves had small-pox. An eruption and fever generally occur within three days of the operation, and at this time the patient is fed on strengthening food, such as meat soup, milk, etc., but no sour or acid substances are given. If no eruption or fever occurs within three days the operation is repeated a second and sometimes a third or fourth time, until it proves successful. When suffering from the eruption, a patient may not be visited by women or other persons who for any reason may be considered unclean according to the custom of the country.

Indigenous remedies.

While the people who live near places where there are dispensaries have begun to appreciate the advantages afforded by British medical institutions and freely visit them, those living in the remote parts still resort to their own simple remedies, of which some account may here be given, and in which charms and amulets of mullás and the dust taken from shrines of local saints play an important part. The fever called Khwa chapi or tora taba (possibly typhus) is considered infectious and in the Hindubagh and Kila Saifulla tahsils, the patient is wrapped in the skin of a freshly slaughtered sheep, and a mullá draws a line round the hut or kizhdi in which the patient is placed to prevent the infection spreading. Bleeding is generally also resorted to, the vein known as ba-salik being opened, and the stem of umán (Ephedra pachyclada) boiled in water is administered to the patient as a diaphoretic. The wrapping of the patient in the skin of a sheep or goat killed fresh for the purpose is also resorted to in cases of pneumonia (skárwai) and malarial fever (zharai taba). In cases of syphilis in the Fort Sandeman tahsil the vein bá-salik of a patient suffering from the disease is opened; the people of Hindubágh

and Kila-Saifulla tabells, however, know no remedy except MEDICAL that the patient goes to a Saiad family in Pishfu, a member of which gives him an amulet. Eye diseases are treated generally with alum which is roasted in ashes and powdered for use, or with the boiled yoke of an egg. In cases of dysentery the powdered rind of the pomegranate or sinzalai (Elwagnus hortensis) mixed with curd is administered.

The pice-packet system of selling quinine, through the Working of agency of the post office, was introduced in 1895. During et aystem of the first year, i.e., 1895-6, 375 packets were sold, of which sale of quinine. 345 were sold at Hindubágh and the remaining 30 at Fort Sandeman. In 1904-5 the sale had risen to 490, of which 193 packets were sold at Mughal Kot, 148 at Girdao, 130 at Gul Kach, and 19 at Fort Sandeman.

Apart from the bazars at Kila Saifulla and Hindubágh, village sant. where sweepers are employed, no arrangements, official or tation and water supply. private, exist for the sanitation of villages. The litter and filth are allowed to remain in the houses and streets until they are removed for manuring the fields. The migratory habits of the people assist considerably in sanitation. With the establishment of peace and security there is also a tendency among zamindars to desert the villages and build their houses near their fields.

The supply of drinking water is drawn from springs, streams or kárezes and in parts of Kila Saifulla from wells; occasionally also it is obtained from pools in which rain water has collected. The wells offer a fairly protected source of supply, but the open channels, which are found in the greater part of the District, are, as already remarked, especially liable to pollution and infection, and are a source of danger in time of epidemics. On the whole the quality of water throughout the District is good. The civil and military station of Fort Sandeman has been provided (1894) with a piped water supply. In 1903 the Civil Surgeon remarked that "owing to the supply of piped water at Fort Sandeman, the improvement of the drainage system, and

MEDICAL.

other sanitary measures, an improvement appears to be taking place in the public health of the town and bazar, but in the villages no appreciable alteration has yet taken place."

SURVEYS.

The Survey Department of the Government of India has prepared and published maps of the whole District on the one-eighth, quarter, and half inch scales.

In connection with the Settlement operations, a cadastral survey on a scale of 16 inches to the mile and based on traverses obtained from the Survey Department, was undertaken in 1901-2, in the Kila Saifulla and Hindubágh tahsíls, of irrigable lands and of such sailába, khushkába, and uncultivated plots as lay within the limits of irrigable area. The Kákar Khurásán and Kajír mauzas in the Hindubágh tahsíl were excluded from the operations. The survey in that tahsíl was kishtwár (field to field) in all circles except Kazha which was subjected to thákbast owing to the temporary division of the lands there. In the Kila Saifulla tahsíl the small mauzas situated on hillsides were surveyed kishtwár, but in the remaining area the survey was thákbast.

The land in both the tahsils was classed under the heads of irrigable, gardens, dry crop, culturable, unculturable, and chaman (grass lands), the irrigable being sub-divided into different classes according to its capacity for yielding crops.

The agency employed for the village cadastral survey was almost entirely non-indigenous and was recruited principally from the Punjab.

CHAPTER IV .- MINIATURE GAZETTEER.

The Fort Sandeman sub-division is made up of two FORT SANDEportions technically known as—(a) the Lower Zhob subdivision consisting of the Mando Khél and Shíráni countries, the Sulaimán Khéls, and the Khurásán tracts along the Kundar river; and (b) Fort Sandeman subdivision consisting of the Fort Sandeman tahsil; but for administrative purposes the whole tract is treated as one and is known as the Lower Zhob sub-division and Fort Sandeman tabsil. The officer in immediate charge is an Extra Assistant Commissioner.

scription.

The tahsil covers the eastern portion of the District General deand lies between 30° 39' and 32° 4' N., and 68° 58' and 70° 3' E., and has an area of 3.583 square miles. The country is hilly, and is intersected by the valley of the Zhob river and many minor valleys including the lower portion of the Kundar.

The tahsil is bounded on the north by Afghan territory, Boundary, the boundary line from Domandi westward having been settled in 1894, on the east by the Sulaiman range which separates it from the Déra Ismáil Khán District, on the south by the Músa Khél and the Bori tahsils of the Loralai District, and on the west by the Kila Saifulla tahail.

The hills in the east of the tahsil belong to the Sulaiman Hill Ranges. range and comprise the Takht-i-Sulaimán (11,070) and Kaséghar (11,300), the original home of the Afghans, Shinghar (9,273), and Torghar (7,517). The northern, western, and southern hills belong to the Toba Kákar range and include the Spéraghar (8,770), Sángghar (7,121), Zhwaeghar (8,144), and the eastern spurs of the Spinghar (8,258).

The northern portion of the tahsil is drained by the Drainage an Kundar and its affluents, which joins the Gomal at

MINIATURE Domandi and then flows due east to Khajúri Kach. The central and the largest portions are drained by the Zhob river, the principal tributaries of which are the Kandíl. the Sri Toi, and Sawara. The eastern portion is drained by the Siliaza and the Khaisara streams both of which rise at the Hatsu watershed, and by the Chuhar Khél Dahána stream.

Forest.

There are at present no State forests in the District. The principal trees in the tahsil are the pistacia mutica. olive, chilahoza (edible pine), nashtar (pinus excelsa) and acacia modesta.

Climate.

The climate generally is very dry; in summer the day Temperature, temperature is high, but, except in the months of July and August, the nights are fairly cool. During July and August thunderstorms are common, and, for some days after a storm, the temperature is considerably lowered. The winter is cold and there are great diurnal variations in the temperature. High winds are common throughout the year. The average temperature of Fort Sandeman in the summer months is about 83° and in winter about 55°. The rainfall is variable and scanty, the annual average of 12 years ending with 1904, being 9.55 inches in Fort Sandeman: 3.97 inches in winter and 5.58 in summer, the highest figures being in March 1.87 and in July 2.29.

History.

The history of the tahsil is given in Chapter I under general history. In 1888 Sir Robert Sandeman, then Agent to the Governor-General, visited Mina Bázár when all the Abdullazai and Pakhézai malika tendered their submission. He then visited Apozai, where the Mando Khéls presented a petition to be taken under British protection. On his return journey Sir Robert Sandeman was met at Gwal Haidarzai by Shah Jahan Jogízai and the leading maliks of Central Zhob who also petitioned that, as they were unable to keep peace and maintain order, the British Government might be

pleased to take them under its protection and that they MINIATURE were willing to pay revenue. The valley was accordingly GAZETTBER. occupied in 1889 and the Bargha Shíráni country included in 1890.

In 1905, the tabsil contained 1 town and 109 villages; ropulation the total population according to the Census of 1901, was 34,712 (males 20,600, females 14,112), of these 32,868 or 95 per cent. were Muhammadans, 1,445 Hindus, 50 European and Eurasian Christians, 38 native Christians, and 311 others including Sikhs. The Hindus are chiefly aliens engaged in Government service, trade or labour. The indigenous Muhammadans are of the Sunni sect, and speak Pashtá. They numbered 29,698 (males 16,015, females 13,683) and are almost all Afgháns. The principal tribes are—Kákars 11,963 (which include 11,782 Sanzar Khéls, the main sections repesented being the Kibzai 6,165, Abdullazai 4,040, Alizai 1,076), Mando Khéls (who are wrongly classed as Panri in the Census records) 4,276, Shíráois 6,974, Sáfi 345, Ghilzais 5,076, and Saiads 966.

The trade of the country is in the hands of the Ghilzai Powindahs, Pakhézai Abdullazais, and Hindus; the bulk of the indigenous population is chiefly dependent on agriculture and flocks. A few of the Harípál, Bábar, and Abdullazai carry on a regular trade in asafætida.

Besides the Fort Sandeman town, the principal villages are—Tangsar (1,419), Murgha Kibzai, where there is a military post, a telegraph and post office, a dispensary, rest house and a small bazar (1,274), Mína Bázár (788), Mardánzi (967), Apozai (445), Brunj (283), Gadai Khél (796), Bádinzai (417), Hurmzai (664), Kákha (745), Haidarzai (502), Girda (672), Mughal Kot military post (139), Koria Wasta (175), Marghbal (354), Chaléra Pasta (576) and Kapíp (245).

Many of the valleys in the tahsil possess a productive Agriculture red clay soil, which is, however, often largely mixed with gravel. Of the area annually cultivated about 90 per cent.

MINIATURE is irrigated and 10 per cent. dry crop, the percentage of GAZETTREE the latter in the Shíráni and Kibzai circles being 24 and 26, respectively. The sources of irrigation are 11 streams (including the Zhob river) and 106 springs. The principal crop of the spring harvest is wheat, and of the autumn, maize and rice. Fruit gardens exist at Fort Sandeman and Mína Bázár only.

A rough estimate, made in 1904, of the agricultural stock belonging to the permanent inhabitants, puts the number of camels at 539, donkeys 1,072, bullocks and cows 8,097, sheep and goats 112,499, and buffaloes 42. The numbers belonging to nomads were estimated at 3,334 camels, 1,402 donkeys, 1,528 cattle, and 41,980 sheep and goats.

Communica-

The principal roads leading from Fort Sandeman are—
the Fort Sandeman-Murgha Kibzai-Loralai-Harnai road;
Fort Sandeman-Khajúri Kach road; Fort Sandeman-Kila
Saifulla-Hindubágh-Khánai road; and Fort SandemanDahána Sar road. The other important tracks are—

- Fort Sandeman to Músa Khél (58 miles), thence to Khán Muhammad Kot (19 miles) and Kingri.
- (2) Fort Sandeman to Shinghar (about 30 miles).
- (3) Fort Sandeman to Gul Kach via Nawe obo (51½ miles) and from Nawe obo to Husain Nika shrine (35 miles).
- (4) From Murgha Kibzai to Músa Khél (30 miles).
- (5) From Murgha Kibzai to Mékhtar (20 miles).
- (6) From Fort Sandeman via Shighala to Kamr-ud din Karéz.

Most of these routes are given in detail in table IX, Volume B.

Administration. The tahsil is divided into 5 patwaris' circles—Mando Khél (head quarters Brunj), Gustoi, Kibzai (Takhae Sulaimanzai), Abdullazai (Mina Basar), and Shirani (Koria Wasta). The tahsil staff consists of a tahsildar, 2 naib tahsildars, a muhasib, a kanange and 6 patwaris,

and there are 209 headmen or maliks. A regiment of MINIATURE native infantry is stationed at Fort Sandeman with detach. GAZEITEEB ments at Máni-Khwa aud Mír Ali Khél. The fort at Murgha Kibzai is held by a small detachment from the cavalry and infantry regiments stationed at Loralai. In 1905 there were 369 men of the Zhob Levy Corps at head quarters, and 428 men (cavalry and infantry) in 12 posts details of which are given in table XXII, Volume B.

Besides the men employed on escort and guard duties at District headquarters, there were (1905) 44 police in the tahsil; the total number of levies was 222 (including 103 sowars) the distribution of which is given in table XXIII, Volume B.

The bulk of the land revenue is levied in kind, the general rate being one-sixth of the produce. In a few villages, however, an annual assessment in cash (*ijára*) is fixed. The annual average receipts including grazing tax for the five years 1897-8 to 1901-2 were Rs. 57,065; in 1904-5, which was an unfavourable year owing to want of rain, the receipts were Rs. 42,842; of which grazing tax represented about 42 per cent.

Among the special products of the tabsil are chilghoza, cumin seed, hysson, rhubarb, and asafætida.

Fort Sandeman Town—The head quarters station of the District, is situated in 31° 21′ N. and 69° 27′ E. It was first occupied in December, 1889. To the natives the locality is known as Apozai, from a village occupied by the Apozai section of the Mando Khéls close to the town. It received its present name from its founder, Sir Robert Sandeman. The station stands about 4 miles east of the Zhob river in an open plain 4,700 feet above sea lovel. A ridge (Toryán) rises 150 feet above the surface of the plain to the north on which stands the house of the Political Agent, known as the Castle. The military lines, bazar, dispensary, and school lie below. The nearest Railway station in Baluchistán is Harnai,

Laud Revenue.

Special Products.

Fort Sandeman. 298 ZHOB.

MINIATURE 168 miles; Darya Khán the Railway station for Déra Ismáil

Khán, is about 122 miles. The population numbered 3,552 in 1901. The garrison consists of a native infantry regiment and of the headquarters of the Zhob Levy Corps. A supply of water for drinking purposes carried by a pipe 9 miles from the Siliáza valley was inaugurated in 1894, at a cost of little over a lakh of rupees. Water for irrigation is also obtained from the same source. A local fund has existed since 1890; the receipts during 1904-5 were Rs. 22,382 and the expenditure Rs. 21,267. One-third of the net receipts from octroi is paid to the local military authorities. The town has a flourishing bazar with about 170 shops and 122 houses. Of the shop-keepers 17 deal in cloth, and there are 15 cobblers and dealers in leather goods, 3 dyers, 7 goldsmiths, and 6 blacksmiths. A staff of 1 jemadár and 17 sweepers is employed for the conservancy of the town. There is a combined Post and Telegraph Office, a serái culled after Major MacIvor, the first Political Agent of Zhob, a Jirga Hall in which is also located a Library, a boys' and girls' school. The European cometery lies at about three-quarters of a mile to the east of the town on the northern bank of the Siliáza stream.

A small sanitarium, 8,700 feet high, exists about 30 miles to the north-east of Fort Sandeman at Shinghar on the Sulaiman Range. It is connected by a bridle-path with Fort Sandeman. It affords a pleasant relief from the oppressive heat of the Zhob valley and the Political Agent, Zhob, generally spends a portion of the summer there. The hill is well wooded with edible pine and ash, and a small political bungalow and a rest house have been built there. The water-supply, though not abundant, is good.

Mina Baear. Mina Bazar.—Lies in eastern Zhob about 25 miles to the south-west of Fort Sandeman and is situated in 81° 4' N. and 69° 17' E.; its approximate altitude is 4,900 feet; the village has buildings of a more durable nature than those met with in other parts of the District, and are built of stone mortared with clay. It is composed of five MINIATURE hamlets; the Bráhimzai, the Mandénzai, the Kabúlzái, the GAZETTEFE. Yásínzai, and the Khidarzai Kili, known after each section of the Pakhézai Abdullazai Kákars. In 1901 the population was 788: males 408, females 380. In pre-British days Hindus from Vihowa had about 30 shops at Mina Bázár and carried on a brisk trade, but since the establishment of the Fort Sandeman station most of them have left. The Pakhézais now own 12 shops. They possess only a small amount of land and have from times past engaged in trade and have made their village the mart for goods from Afghánistán and India, almonds, pistachio nuts, postine, and asafætida from Southern Afghánistán being exchanged for common cotton cloths from India. A small amount of ghi and wool is also exported. The village lands are irrigated by the Mazghar and Sawara streams, and there are two small orchards containing vines, mulberries, almonds, apricots, pomegravates, and peaches. Drinking water is obtained from a small káréz. The first expedition into the Zhob valley under the command of General Sir O. V. Tanner, accompanied by Sir Robert Sandeman, visited the place in 1884, and it was at Mina Bázár that, during Sir Robert Sandeman's mission in 1888. all the Abdullazai maliks tendered their submission. A patuári is stationed at Mína Bázár and there is also a levy post.

The Upper Zhob Sub-Division comprises the tabsils of Kila Upper Zhob Saifulla and Hindubágh, and is in charge of an Extra Assistant Commissioner, with head quarters at Hindubagh.

The Kila Saifulla Tahsil lies in the centre of the Zhob Kila Saifulla District along the central part of the valley of the Zhob river and is situated between 30° 32' and 31° 43' N. and 68° 9' and 69° 18' E. Its greatest length from north to south is about 81 miles, and the greatest breadth from east to west about 72 miles, and it covers an area of about 2, 768 equare miles. The tahsil derives its name from a mud fort

Tabsil.

300 ZHOB.

MINIATURE situated near its headquarters and called after its founder Saifulla Khán who was a man of influence among the Khoidádzai Sanzar Khéls.

> The greater part of the tabsil consists of hill ranges intersected by hill torrents, but the ground along the main Zhob valley is flat.

Boundaries.

It is bounded on the north by Afghan territory, the line forming part of the boundary demarcated in 1894; on its east lies the Fort Sandeman and on the west the Hindubágh tabsil, while in the south a range of hills separates it from the Bori tabsil of the Loralai District.

Hill Ranges.

The hills belong to the Toba Kakar range, and the prinpal ones are the Torghar (Shagana Kotal 6,790, Azak 8,389, Baliaraghar 9,705); Spinghar which separates the Khaisor valley from the Zhob valley (Shina-ghara 8,680, Shorghar, Spinghar 9,634, Yavháshki 9,723) and the southern hills (Churmaghar 6,931).

Drainge and Rivers.

The main drainage of the tahsil is carried off from west to east by the Zhob river and several of its affluents, the principal of which is the Toi. The northern slopes of the Torghar range are drained by the Kundar which traverses the northern portion of the tahsil.

Forests.

There are no reserved forests in the tahsil; the principal trees are the pistachio Khanjak, known locally as the wana, wild pomegranates, shang or ash, olive (showan), zraly (Berberis vulgaris), and tamarisk.

Climate,

July and August are the hottest, and January and Febru-Temperature, ary the coldest months. During the latter months the temperature varies from 98° to 30°. Strong winds constantly blow from a westerly direction, and in winter, when the wind is high, the cold is intense. In the hot season strong winds raise clouds of dust in the valley. The rainfall is precarious and scanty. No record of the rainfall was kept previous to 1900, and during the four years ending with 1904 the annual average was 4:15 inches; 1:83 inches in winter and 2.82 inches in summer, the highest fall being 1.47 inches in March and 1·18 in May. The period in question was one MINIATURE of general drought and it is possible that these figures do GAZETTEER. not represent the true condition of the country in more favourable seasons.

Kila Saifulla is the home of the Jogízai family, round History. which centres the history of the District. Sháh Jahán, the head of the family, who was known as the bádsháh or ruler of Zhob, with his tribal headmen tendered his submission to Sir Ro bert Sandeman at Gwál Haidarzai in 1888, and the tahsíl came under British protection in 1889. It was first treated as part of Hindubágh, but in 1893 a náib tahsíldár was posted to it, and in 1902 Kila Saifulla was made into a separate tahsíl.

In 1905 the tabsil contained 60 villages and its total Population. population according to the Census of 1901 was 19,229: (males 10,463, females 8,766). Of these, 19,203 were Muhammadans, 19 Hindus all aliens, 3 native Christians and 4 others. The indigenous Muhammadans are of the Sunni sect, and speak Pashtú; they number 19,108 and are almost all of the Afghan race. The principal tribes represented are—the Ghilzais 519, Kákars 18,506, and Saiads 65. The Kákars belong to the following clans: Sanzar Khél 18,411, Sargara 58, Sanatia 30. The details of the sections of the Sanzar Khél Kákars are given in table II-A, Volume B. The principal sections in the tabsil include 16,889 Alizai, 470 Barat Khél, and 818 Arabi Khél. The most important sub-section of Jalálzai-Shádozai-Alízai are the Jogízai who in 1901 numbered 740: males 396, females 344.

The bulk of the population is engaged in agriculture, though some combine with it flock-owning and camel-breeding and a few manufacture earth salt. The local trade is in the hands of the Hindu shopkeepers and Powindahs.

The tabsil headquarters station is Kila Saifulla, which has the usual buildings, viz., a post and telegraph office, a rest house, civil dispensary, a primary school, and half-adozen shops. Drinking water is obtained from the Rabát

MINIATURE Gazetter. Káréz, and there are two small gardens irrigated by wells. The question of the water supply has always been one of great difficulty and it is proposed to try the experiment of sinking artesian wells. Other principal villages are—Rod Jogízai, a collection of 7 hamlets including Sharan (2,806), Gwál Ismáilzai (1,407), Akhtarzai (916), Ghorézai Pitao (928), Ali Khéi (822), Bátozai (1,848), Barat Khéi (514), Bahádurwál (798), Bandát Mírzai (691), Tauda Safarzai (521), and Tánishpa (248). This last-named village (7,850 feet in height) is picturesque and is surrounded by hills on all sides. It possesses an abundant supply of good water, and a small amount of cultivation. The late S. B. Nawáb Bangul Khán had a stronghold here and the rocks constituting the fastness were blown up by the troops under General Sir George White in October, 1890.

Agriculture.

In 1901-2 a survey of the irrigated maháls in the tahsíl was carried out which showed an irrigable area of 21,678 acres, the sources of irrigation being 10 streams, 52 kárézes, and 52 springs. The area under crop in 1904-5 was 10,682 acres, of which 8,651 were under spring and 2,031 under autumn crops. The area under principal crops was—wheat 8,055, juári 624, barley 596, maize 306, and millets 1,064 acres.

There are considerable tracts of dry crop area which have been embanked and which mostly lie in the Ali Khél and Musáfirpur circles. They are chiefly cultivated with wheat, the amount of the Government share at one-sixth realised in 1904-5 being 3,190 maunds or 44 per cent. of the total amount of wheat collected as revenue.

A rough estimate made, in 1904, of the agricultural stock belonging to the permanent inhabitants put the number of camels at 2,837, donkeys 423, cattle 631, sheep and goats 60,615. The numbers belonging to nomads were estimated at 1,831 camels, 97 donkeys, 25 cattle, and 2,448 sheep and goats.

Communications. Kila Saifulla, the tahsil headquarters lies on the Khánai-Hindabágh-Fort Sandeman road 833 miles from the Khánai Railway station and 88 miles from Fort Sandeman. The MINIATURE other important routes are—(a) from Akhtarzai to Loralai GAZETTEER. via the Dholu pass (28 miles); (b) from Gwál Haidarzai to Loralai (39 miles); (c) from Kila Saifulla to Kamr-ud-dín Karéz by Rod Jogízai and Tánishpa; and (d) from Kila Saifulla to Késhatu by the Loe Liár.

The tahsil is divided into three circles—Kila Saifulla, Administrative Staff. Ali Khél, and Musáfirpur. The staff consists of a tahsildár, a núib tahsildár, a muhásib, two kánúngos, and four patwáris. There are 128 village headmen or maliks. A small detachment of native infantry supplied by the regiment at Loralai is stationed at Kila Saifulla to guard the treasury. The question of replacing this detachment by police is now under consideration (1906). The Police post consists of 12 men under a deputy inspector, and there are 105 levies distributed over 14 posts, details of which are given in table XXIII. Volume B.

The land revenue is levied in kind at one-sixth of the Land Reveproduce, the Government share being generally determined by appraisement of standing crops (tashkhis). The annual average receipts from 1897-8 to 1901-2 were Rs. 31,660 and in 1904-5 Rs. 31,481. In this year grazing tax contributed Rs. 9,639 or about 31 per cent. of the total revenue.

The special products of the tahsil are cumin seed, hyssop, special Propistachio khanjak, and shikampára (fleawort seed). Earth salt is manufactured in the Multani tracts which lie south of Spinghar and coal seams have also been noticed.

The Hindubágh Tahsíl of the Upper Zhob Sub-Hindubágh Division lies in the western part of the Zhob District, and is General Desituated between 30° 36′ and 31° 50′ N., and 67° 27′ and scription. 68° 46′ E. Its area is about 3,275 square miles.

The tabsil is covered with hills interspersed with valleys, the principal ones being the Marzaghán valley between the Súrghund and Dowrau hills, the Upper Zhob also known as the náwah which runs from Murgha Mehtarzai on the west to Kazha on the east and which has in places alluvial flats,

MINIATURE Gasetteen. the Indar Bés Shéla between Kand and Khazina halls; the Rod Fakirzai or Bábu Ohina valley between Khazina and Taghratu, the Kajir, Kákar Khurásán; and the Kamchughai which lies in the south western corner of the tahsil.

Boundaries.

It is bounded on the north by the Toba Kákar range which separates it from Afghánistán, on the east by the Kila Saifulla tahsíl, on the south by the Bori tahsíl of the Loralai District, and on the west by the Pishin tahsíl of the Quetta-Pishín District.

The local tradition asserts that in ancient times a Hindu fakir planted a tree of the description known as bågh in Kákar parlance, and hence the name.

Hill Ranges.

The hills of the tahsil belong to the Toba Kákar range, and the principal ones are—the Kand (10,786) in the extreme west, which in the north is known as Barsha or Nigánd (9,438); Súrghund (10,609) in the south-western corner; Marzaghán (Atoka 9,364) in the south; Malkand and Sraghar in the north; the Torghar (9,705); Yavháshki (9,728) on the western spur of the Spínghar range; Thor (9,274), Súrghundi (8,295), Sharan (8,558), and Sakír (10,125).

Drainage and Rivers.

The main drainage of the tahsil is from west to east and is carried by the Zhob river, which is known in its upper reaches as the Lahar; its principal tributaries in the tahsil are the Kamchughai and the Rod Fakirzai from the north and Marzaghán from the south. The Kundar, Wáli Murgha, and a number of hill torrents drain the country north of Torghar.

Forests.

There are no reserved forests. The principal trees are juniper, which is chiefly found in the Súrghund hills in the south, the wans or pistachio khanjak, the tamarisk in Rod Fakírzai, korae or zrálg (Berberis vulgaris) in Khurásán, máhhai (caragana), sanzalae (Trebizond date), shang (ash), and showan (olive).

Climate, Temperature, and R dnfall, Snow falls from December to March, during which months the average temperature is about 40°. A strong

and cold wind also blows constantly from the west often for MINIATURE a week or so at a time. September, October, March, and GAZETTEER. April are temperate months. The summer lasts from May to August when the temperature ranges between 70° and 80°.

The rainfall is scanty and precarious. In the four years ending with 1904, the average rainfall was 4.92 inches; 3.94 inches between October and March and 0.98 inches between April and September, the heaviest rainfall having been recorded in March, 21 inches and in January 1.11. As already noted in connection with the rainfall of the Kila Saifulla tahsil the four years in question were exceptionally dry ones and it is possible that in more normal years the average is higher.

Hindubágh came under British protection after Sir Robert Sandeman's mission towards the end of 1889 and a tabsil was established in 1890.

History.

population, according to the census of 1901, was 15.777 (males 8,574, females 7,203). Of this number 65 were Hindus, all aliens, 5 native Christians and 6 others, the remainder (15,701) being Muhammadans. The indigenous Muhammadans are of the Sunni sect, speak Pashtú and are almost all of the Afghan race. They numbered 15.611; males 8,462, females 7,149. The principal tribes represented are-the Ghilzais 1,905, the Kákars 12,599, Lawána (Pannis) 958, and Saiads 107 (Yásínzai 38, Kharshín 32, Táran 28). The principal clans of the Kákars in Hindubágh are-Sanzar Khél 7.473, Sargara 707, and Sanatia 4,399. The chief sections of Sanzar Khéls in the tahsil are-Jalálzai 723, Khoedázái 2,010, Mardánzai 1,361, Mírzai 2,678, and

In 1905 the tahsil contained 76 villages, and its total Population.

The bulk of the population is engaged in agriculture. but the Sanatia Kákars, Lawánas, and others are largely flock-owners.

Nas Khél 512. The Sanatia clan is represented by Isa

Khél 1.559, Mehtarzai 2,595, and Sárangzai 174.

Mirjature Gazettere. The headquarter station is also called Hindubágh and is situated in the Parkanda mahál. Besides the usual tahsíl, police and levy buildings, it has a house for the Assistant Political Agent, a rest-house, a dispensary, a primary school, a combined Post and Telegraph Office, a small library, a good garden, and five shops. Its population including that of Loe and Kam Kéréz was (in 1901) 1,185. Other principal villages are—Bábu Chína or Fakírzai village (165), Indar Bés (255), Kajír (1,002), Sáleh Káréz (359), Kamr-ud-dín Káréz (744), Kundar (453), Mullá Kutab Chína (649), Kánr Mehtarzai (907), Murgha Mehtarzai (474) and Kazha (514).

Agricuture.

During the cadastral survey of 1901-2 the irrigable area of the tahsíl excluding Kajír and Khurásán was ascertained to be 17,849 acres, the sources of irrigation being 5 streams, 71 kárézes and 279 springs. The area under crop in 1904-05 was 6,166 acres (including 81 acres under gardens) of which 4,989 acres were under spring, and 1.146 acres under autumn crops. The principal crops were-wheat (4,487 acres), barley (502), maize (752) and millets (294); melons and a small quantity of tobacco are also grown. A rough estimate made in 1904, of the agricultural stock belonging to the permanent inhabitants puts the number of camels at 280, donkeys 378, cattle 308, and sheep and goats 89,760. The numbers belonging to nomada were estimated at 6.940 camels. 7,054 donkeys, 15 cattle, and 25,000 sheep and goats.

Communi-

The nearest railway station is Khánai (45 miles) on the Sind-Pishín Section of the North Western Railway. The principal route is the Khánai-Hindubágh-Kila Saifulla-Fort Sandsman road, which traverses the south of the tahsil. Hindubágh is also joined by a bridle-path with Chinjan on the Pishín-Déra Gházi Khán road (28 miles) and with Murgha Fakírsai (25 miles) whence a track goes to Loeband, Késhatu and Kamr-ud-dín Káréz. The other important routes are—(a) from Hindubágh to Spérarágha

(32 miles) on the Pishin-Déra Gházi Khán road; (b) from MINIATURE Kazha to Bábu Chína (33 miles); (c) from Hindubágh to GAZETTEBE. Háji Khán Kila and Kazha Viála (Barshor) in Pishíu through the Kamchughai glen: this route is not fit for laden camels; and (d) a track from Murgha Fakírzai to Laghai and Háii Khán Kila (c 25 miles).

tive Staff.

The tabsil is divided into five* circles—Kákar Khurásán. Administra-Bábu Chína, Kazha, Hindubágh, and Murgha Mehtarzai, and the administrative staff consists of a tahsildar, a naib tahsildár, a muhásib, 3 kúnúngos, and 7 patwáris and there are 165 headmen or maliks. A small detachment of native infantry supplied by the regiment at Loralai is stationed at Hindubagh to guard the sub-treasury. The question of replacing this detachment by police is now under consideration (1906). The police post at Hindubágh consists of 12 men; and there are 57 District levies distributed over 7 posts, details of which are given in table XXIII. Volume B. The Zhob Levy Corps garrisons the important frontier posts of Kamr-ud-dín Káréz (29 men), Késhatu (19 men) Tirkhawar (48 men), Ghazlúnawar (27 men), and Loeband (35 men).

The land revenue is levied in kind at the rate of onesixth of the produce and is generally assessed by appraisement of crops. The annual average receipts from 1897-8 to 1901-2 were Rs. 19,089, and in 1904-5 Rs. 27,459. this year grazing tax contributed Rs. 12,571 or 46 per cent. of the total revenue.

Land Revenue.

Cumin seed, hyssop, shirkhisht, locally known as sharivi (Atraphagis spinosa), liquorice, réwand chini (Rheum emodi), and the gum of sarga (Prunus churnea), are found in the tahsíl. Abundant asbestos deposits occur in the Spínpoti hills near Telérai Muhammad Ján, and chromite ore is found in the Tor Jang hill and other places close to Hindubágh.

Special Products.

Kamr-ud-din Karez in the north-east of the tahsil is an important post close to the Afghán border on the

Kamr-uddin Káréz.

^{*} Hindubágh and Murgha Mehtarzai are each again sub-divided into two circles, eastern and western,

308 ZHOB.

MINIATURE GAZETTEER. main háfila route. It is about 136 miles from Hindubágh and 127 from Fort Sandeman. The post lies to the south of the Multani Ghar on the bank of the Sanzali Khura hill torrent. The inhabitants, who are Lawánas (population 99 in 1901), are chiefly nomads and flock-owners; they also manufacture earth salt. Those of them who engage in cultivation share the water of the Tirwalún streams with the Tarakis living in Afghán territory. The headman of the Lawánas is Gare Khán Ismáilzai. The post is garrisoned by a detachment of 28 men of the Zhob Levy Corps under a Subadár; a levy inspector and a patwári are also stationed there. It has a small rest-house, and a combined Post and Telegraph Office.

KAMOHU-GHAI. Kamchughai, as its name implies, is a narrow glen on the eastern face of the Kand mountain and dividing it from the Tabai range to the east. This glen opens out into the Zhob valley by the village of Rágha Bákalzai and the head of it starts from Chingi on the road to Háji Khán Kila. The total length is about 16 miles.

Elphinstone writing in 1838, described Kamchughai as follows:—

"The soil is fertile, and in most parts well cultivated. In spring the whole valley and the adjoining hills are green and covered with flowers; and the inhabitants are busily employed till the end of autumn in the cultivation of two harvests and in the care of their sheep and cattle; but in winter a frost of three months, and occasional fortnight of snow, oblige them to indulge in the usual idleness of the season. The inhabitants form part of the clan of Sunnutteea (Sanatia), the possessions of which extend along the western frontier of the Caukers (Kákars) from Zawurs (Zawar) to the Seecona Daugh (Siuni Dag). This large division is under one chief, who enjoys a very ample authority over his clan, at least over the part of it in the neighbourhood of Cunchoghaye; his own seat is at Oorguss, two marches from that place. The Malik of Cunchoghaye

receives a fixed allowance of grain from every man in the MINIATURE village. The shepherds near Cunchoghaye are scattered in GAZETTERE. small camps of four or five tents over the wide valley and neighbouring hills. In some seasons they are compelled, by the failure of the herbage to unite into larger camps, and to move to the country of other tribes while in their scattered state, a whole camp only contains a single family and they have much leisure, no restraint, no government and yet no crimes. The dress, manners, and customs of Cunchoghaye differ in no respect from those of the wilder parts of the Dooraunee (Durráni) country; and they are said to be the same which obtain throughout all the western claus of the Caukers."

R. S. Diwán Jamiat Rai, Assistant Gazetteer Officer, who visited the glen in 1903 gives the following account of it:—

"The principal villages are Murgha Bákalzai, Ghatta Tízha, Mala Shákh, and Rágha Bákalzai, but there are several other hamlets scattered about the glen. Up to Kachhai the lands are owned by the Bárakzai sub-section of the Sanatia Kákars while below are Bákalzais. From Kachh downward, every village contains a considerable number of fruit trees, the apricot, sanzalai, and vine predominating, with willows and mulberries. The huts in all these villages are built along the slopes of the hill, almost all on the western side. The fields are terraced, having been cut from the sides of the hills, and some of them have stone walls as high as ten feet and the water for irrigation has been led from the stream to various heights. The track is for the most part rugged and only fit for horses, mules, or lightly laden bullocks."

Bibliography.

Baluchistán Agency Annual Administration Reports.

Census of India, 1901, Volume I.

Census of India, 1901, Volumes V, V-A, and V-B, Baluchistán, by R. Hughes-Buller, I. C. S.

Cunningham's Ancient Geography of India, 1871. Eiliot's History of India.

Elphinstone's History of India, 1889.

Gazetteer of the Déra Ismáil Khán District, Lahore, 1883-84. Holdich, Colonel Sir Thomas, The Indian Borderland, 1901. Holdich, Colonel Sir Thomas, India, 1904.

Journal of the Asiatic Society of Bengal, Volume LXXII, Part III, No. 2, 1903: Note on Kákars Living in the Zhob District, by R. S. Diwán Jamiat Rai.

Journal of the Royal United Service Institution, Volume XLVII, No. 302, 1903: Campaign against India from the West and through Afghánistán.

McFall's With the Zhob Field Force, 1895.

Records of the Geological Survey of India, Volume XVII, Part IV, 1884.

Records of the Geological Survey of India, Volume XXV, Part I, 1892.

The Life of Abdur Rahmán, Amír of Afghánistán, by Mír | Munshi Sultán Mahomed Khán, 1900.

The Numismatic Ohronicle, Fourth Series, Volume IV, London, 1904.

Thornton, T. H., C.S.I., D.C.L., Life of Colonel Sir Robert Sandsman, 1895.

Joint agreement executed by the Joint Afghan and British Commissioners of the Indian Afghan Boundary Commission.

We, the undersigned Commissioners, deputed by our respective Governments to demarcate the boundary line between the territories of the Government of India and His Highness the Amír of Afghánistán, westwards, from the junction of the Kundar and Gomal rivers, have arrived at the following mutual agreement regarding that boundary line, in accordance with the maps and instructions furnished to us by our respective Governments:—

Clause No. 1.—The boundary line to which we have mutually agreed runs from Domandi, i.e., the junction of the Gomal and Kundar rivers, along the line of the watercourse of the Kundar river as far as the junction of the Kundar and Kundil rivers. It thence runs along the watercourse of the Kundil river, which is here generally known as the Zhizha as far as the junction of the Kundil and Sharan Toi rivers. From the junction of the Gomal and Kundar to the junction of the Kundil and Sharan Toi rivers we consider that it is not only unnecessary but impracticable to erect boundary pillars. The centre of the flowing stream of the Kundar and Kundil rivers forms in itself a well-defined and natural boundary, and any boundary pillars erected along this line would be liable to be carried away by floods.

Clause No. 2.—From the junction of the Sharan Toi and Kundíl rivers the boundary line, which we have mutually agreed to, follows the centre of the river-bed of the Sharan Toi river upwards from its junction with the Kundíl about one and a quarter miles to boundary pillar No. I, which has been erected on a rocky knoll on the south bank of the

Sharan Toi river. From thence it runs north-west in a straight line to boundary pillar No. II which has been built on a prominent peak on the east bank of the river at the lower entrance of the Tangi through which the river issues on to the plain. Thence it runs northward to boundary pillar No. II (1), which is on a conspicuous peak on the west bank of the river at the upper entrance of the same Tangi. Thence it runs in a straight line northwards to boundary pillar No. III, which has been erected on the top of a prominent peak, known as Orzal Ghara, which is situated between the two main branches of the Sharan Toi river, i.e., the Sara Cháhán nullah and its branches on the west and the Ghbargai nullah and its branches on the east.

From boundary pillar No. III, i.e., Orzal Ghara, the boundary line runs westwards in a straight line to boundary pillar No. IV on a conspicuous peak of the Pinakai range, and thence runs north-west in a straight line to boundary pillar No. V, which has been erected on the most northern of a line of high prominent peaks which form the southern branch of the Shahghar range. The line, marked by boundary pillars Nos. III, IV, and V, follows approximately the watershed between the Orzal Ghara and Shahghar of the water which drains to the north and east and the water which drains to the south and west.

From boundary pillar No. V, the boundary line then runs south-west following the crest of the line of peaks, which form the southern branch of the Sháhghar rango. Pillars Nos. V (1), V (2), and VI have been erected on prominent peaks of this line. Pillar No. VI is on the top of the most southern peak of this branch, which here juts out into the Kosaka plain.

From pillar No. VI, the boundary line runs westwards in a straight line to boundary pillar No. VII, which has been erected on a conspicuous knoll situated about 450 yards almost due north of the old Lowana and Taraki fort

commonly known as Killa Zara, and about 850 yards from the nearest point of the northern bank of the Tirwah river.

Clause No. 3.—With regard to the boundary line from boundary pillar No. VII, considerable difficulty has been experienced by us in arriving at a settlement owing to the joint ownership by the Shabeh Khél Tarakis and Lowánas of the Tirwah lands. By an ancient settlement of very many years ago, which these two tribes had agreed upon between themselves, the water of the Tirwah canal was divided by agreement into twenty-one shares, i.e., twenty-one Shabánaroz as follows, i.e., twelve shares, i.e., twelve Shabánaroz were fixed as the property of the Lowánas, and nine shares, i.e., nine Shabánaroz, as the property of the Shabeh Khél Tarakis. This division of the water still remains in force, and we have jointly agreed that it should remain in force hereafter as before.

As regards the land, the Lowánas and Shabeh Khél Tarakis were not agreed as to the boundary line separating their respective shares, and it has been necessary for us to settle this matter. After some discussion the Lowánas and Shabeh Khél Tarakis agreed to settle their boundary by oath. The joint agreement recorded by them is attached to this agreement. Oath was given by the Lowánas to the Shabeh Khél Taraki maliks Ghulám Rasúl, son of Gul Khán, and Sadik, son of Alam Khán, who, taking the Korán, marked out their boundary, from the point where the Tirwah canal leaves the bank of the Tirwah river near Killa Zara. We have jointly agreed to this settlement of the boundary line thus arrived at, between the Lowánas and Shabeh Khél Tarakis.

We have also jointly agreed to the following matters connected with the other rights abovenamed, of the Shabeh Khél Tarakis and Lowánas, i.e.—(1) the joint rights to the water of the Tirwah river of the two tribes, Lowánas and Shabeh Khél Tarakis, residing in Tirwah, as far as the head

of the water jointly owned by these two tribes, i.e., up to the place which is known by the name of Wruskai Karbore. i.e., the western point of the Karbore hill, above which point the Lowanas and Tarakis have no concern, will be according to the following shares, viz., the Lowanas to have twelve Shabanaroz, and the Tarakis nine Shabanaroz as hitherto from ancient times. Both tribes shall be responsible for the clearing of the water-canal according to ancient custom and according to the abovementioned shares: (2) neither of the parties, i.e., neither Lowánss nor Tarakis shall, independently of each other, or against the wishes of each other, make a new course anywhere as far as the point where the old water canal ends in the cultivated land, i.e., the point where boundary pillar No. A III has been erected, for the old water canal of Tirwah, which passes through the Lowána and Taraki lands; and (3) the thoroughfare of both these tribes, i.e., Lowánas and Shabeh Khél Tarakis through any place where there may be no cultivation, will be allowed in any direction within the Taraki and Lowana boundaries in Tirwah.

We have jointly agreed that the boundary line between the lands of the above two tribes should be the boundary line between the territories of our respective Governments. This boundary line runs as follows :- Starting from boundary pillar No. VII it runs southwards in a straight line about 380 yards to a boundary pillar No. A I on the north bank of the Tirwah joint canal opposite Killa Zara, which is situated a few yards away on the other side of the canal. Thence it follows the line of the joint canal as far as boundary pillar No. A II, which has been built on the south bank at the point where present cultivation commences. Theree it runs eastwards along the same joint canal as far as boundary pillar No. A III, which has been built at the point where the existing joint canal ceases. From here it runs eastwards in almost a straight line to a prominent peak on the Ghwaimar hill, where boundary pillar No. A IV has been

built. Between boundary pillars Nos. A III and A IV five smaller boundary marks A III (1), A III (2), A III (3), A III (4), and A III (5) have been made to mark the line of boundary as laid down by the maliks on oath.

From pillar No. A IV the boundary line runs south-westwards in a straight line to a southern peak of the Ghwaimar hill where a boundary pillar No. A V has been erected. From here it runs westwards in a straight line to a rocky prominence on the east bank of the Tirwah river where boundary pillar No. A VI has been erected. The boundary line then runs upwards along the centre of the bed of the Tirwah river until it arrives opposite to the point at which the Tirwah canal turns off from the bank of the Tirwah river near Killa Zara. At this point boundary pillar No. A VI (1) has been erected on the south bank of the Tirwah river. The boundary line here leaves the river and goes west in a straight line 280 yards to boundary pillar No. A VI (2) erected on a knoll. From here the boundary line runs in a straight line north-westwards up a spur of the Sraghar hill to boundary pillar No. VIII and thence up the same spur in a straight line to boundary pillar No. IX, which is on the top of the most northern of the high peaks of the Sraghar range. From here the boundary line runs in a straight line west 5 miles to boundary pillar No. B I erected in the plain and thence in a straight line north-west for 22 miles to boundary pillar No. B II erected on a small prominent hill. From here the boundary line runsfinla straight line to Khizr Cháh (well) and from Khizr Cháh (well) in a straight line north-westwards to boundary pillar No. XI, which is built on the top of a prominent hill locally called Roza Khurak. The boundary pillar No. X, which should have been built at Khizr Cháh (well), has not been erected there owing to the low-lying position of the land round Khizr Chah, but has been built outside the British boundary on the top of a prominent hill 258 yards north-east of Khizr Cháh in order that it may be seen from the boundary pillar on the Sraghar mountain, and that on Roza Khurak. The old kárémes and cultivated lands belonging to the Tarakis on the Tirkha nullah and elsewhere between Sraghar and Khizr Cháh are thus left on the north of the boundary line marked by pillars Nos. IX, B I, B II, and the pillar marking Khizr Cháh, i.e., No. X, and are, therefore, included in Afghán territory.

We have agreed that the Khizr Cháh (well) should be open to all persons whether living in British or Afghán territory.

From boundary pillar No. XI, it runs north-west in a straight line to boundary pillar No. XII, which has been erected on a prominent peak of a southern spur of the Inzlan range.

Clause No. 4.—We have jointly agreed that from boundary pillar No. XII, the boundary line runs south-westwards in a straight line to boundary pillar No. XIII erected on a prominent knoll on the edge of the Súrzangal plain. From here it runs south-westwards in a straight line to boundary pillar No. XIV which has been erected on the east bank of the Kand river between the Inzlan and Multani hills. From this point the boundary line follows the centre of the river bed of the Kand river, which forms a well defined natural boundary as far as the junction of the Loe Wuchobai nullah and the Kand river, some two miles east of Rashid Killa. Boundary pillar No. XV has been erected on the east bank of the Loe Wuchobai nullah, at the point where it joins the Kand river.

We have jointly agreed that the Kákars should continue to enjoy, as hitherto, the right of grazing over the tract of land named Man Zakai, situated on the north bank of the Kand river between Rashid Killa and Ata Muhammad Killa.

We have also jointly agreed that the water of the Kand river belongs jointly to the subjects of the British Government and His Highness the Amír of Afghánistán. The

Afghán, subjects have the right of repairing and maintaining their existing bands at Tang Bara, and the two Anizai Wastas and Wand, for the purpose of irrigating their lands on the north bank of the Kand. Should subjects of either the British Government or His Highness the Amír of Afghánistán wish to erect a new band in the Kand river, they must first obtain the permission of the district officers, who may be concerned, of both Governments.

Clause No. 5 .- We have jointly agreed that from boundary pillar No. XV the boundary line leaves the Kand river and runs along the east bank of the Loe Wuchobai nullah, through boundary pillar No. XV (1), to boundary pillar No. XVI, which has been erected on a small knoll on the east bank of the nullah. From here the boundary line leaves the bank of the Loe Wuchobai nullah and runs in a straight line to boundary pillar No. XVII, which has been built at a distance of three-quarters of a mile to the east of the Loe Wuchobai nullah on a prominent knoll. From here the boundary line runs in a straight line crossing the Loe Wuchobai nullah to boundary pillar No. XVIII, which has been erected on the watershed between the Tanda and Loe Wuchobai nullahs. From No. XVIII, the boundary line runs in a straight line to boundary pillar No. XIX, which has been erected on a prominent peak on the main watershed between the nullahs flowing into the Loe Wuchobai nullah on one side and the nullahs flowing into the Tanda nullah on the other. The boundary line then runs eastwards and then southwards along the crest of this watershed through boundary pillars Nos. XIX (1) and XIX (2) erected on prominent peaks to boundary pillar No. XIX. (3), which is also on a prominent peak of the same watershed. From boundary pillar No. XIX (3) the boundary line turns eastwards and runs, as shown in the map attached, in a straight line through boundary

[&]quot; Map not printed.

pillar No. XX to boundary pillar No. XXI which has been erected about a quarter of a mile to the east of the main branch of the Tirkha nullah on the edge of the Pinakai plain. From here the boundary line crosses the western extremity of the Pinakai plain and runs south-eastwards in a straight line to boundary pillar No. XXII, which has been erected on a prominent peak of the mountain lying between the Alajirgha and Ghazluna nullahs. From thence it runs in a straight line to pillar No. XXIII erected on a knoll in the plain between the above two nullahs. From here it runs southwards in a straight line to boundary pillar No. XXIV, which has been erected between and at the junction of the Alajirgha and Ghazluna nullahs. From here the boundary line follows the centre of the Psein Lora. Pillars Nos. XXIV (1), XXIV (2), and XXIV (3) have been erected to more clearly mark the course of this river. From boundary pillar No. XXIV (3), the course of the Psein Lora is naturally clearly defined and further boundary pillars have been considered unnecessary. The boundary line follows the Psein Lora, which, from the junction of the Tokarak river, is known as the Kadanai river, and runs along the centre of the river-bed of the Psein Lora and Kadanai for nearly 39 miles to boundary pillar No. XXV which has been erected on the south bank of the river on a prominent knoll about one mile above the junction of the Loe Ghbargai nullah with the Kadanai river. Here the boundary line turns westwards and leaves the Kadanai river.

We have also jointly agreed on the following matters relating to the portion of the boundary line defined in this clause:—

Firstly.—That the rights attaching to the Psein land which is within Afghánistán and close to and to the west of boundary pillars Nos. XVI, XVII, and XVIII, of water from the Kákars, who own the right to the water of the Loe Wuchobai nullah above that, will remain as hitherto.

Secondly.—That the Kákar tribe should continue to enjoy the rights of grazing, as hitherto, throughout the country lying between the Kand river, and Loe Wuchobai nullah and Bábakr Cháhán and Sam Narai.

Thirdly.—That the Pseins should continue to enjoy the right of grazing, as hitherto, in the tract of land commonly known as Psein Dagh, which is situated on the south of the Psein Lora.

Fourthly.—That the water of the Psein Lora and Kadanai river belongs jointly to the people residing on both banks of the river.

If any of the subjects of the British or Afghán Governments wish to construct a new water channel leading from the Psein Lora or Kadanai river, they must first obtain the permission of the district officers concerned of both Governments.

Translation of a joint agreement executed by the Lowánas and Tarakis with regard to lands in Tirwah.

This day, the 24th of the month of Rabi-ul-Awal, 1812 Hijrah (corresponding with the 25th September, 1894), the matter of decision regarding lands situated in Tirwah between the Lowána and the Shabeh Khél Tarakis, inhabitants of Tirwah, was discussed in the presence of Khán Bahádur Hak Nawáz Khán and Abdur Rahmán Khán, representatives of the British Commissioner, and Khán Sáhib Mansúr Khán, appointed on behalf of Sardár Gul Muhammad Khán. After discussion we agreed in this manner that we Lowána maliks, namely, Khán Zamán, Shamak, Garrai Khán, and Morád Khán, on our own behalf and on behalf of the rest of the Lowána people appointed Ghulám Rasúl and Sadik, the maliks of the Shabeh Khél Tarakis, as absolute agents, that both of them may take up in their hands the holy Koran and divide the aforesaid

disputed lands. Whatever line of boundary they, may fix in those disputed lands between us, the Lowána people and the Shabeh Khél Tarakis, we both the tribes, accept. If hereafter any one of us of either tribe should infringe this, our decision, all the disputed lands shall belong to that (of the two) tribe which abided by its agreement. These few lines have therefore been written as agreement and to serve as a bond for the future.

Appendix II

Alphabetical List of common Trees and Plants of the Zhob District.

Pashtu name,	Scientific name,	Description or English Name where known	Locality where found.	Brief remarks as to local uses.
Anangah	Prunus cerasus	Wild Cherry.	All hills	*******
Anár or Nar- gosa.	Punica grana- tum.	Pomegranate.	Kila Saifulla gardens and all hills.	
Angúr	Vitis vinifera .	Grape	Gardens	The principal varieties are: tor, haita, kala- mah, uzhdaspin, siir, spin, kishmishi, and era kishmishi.
Arghuch	Scorzonera (?) Mollis, Bieb.	Scorzonera	All hills	Used as a famine food,
Bádám	Prunus amyg- da lus.	Almond	Upper Zhob Sub- Division.	*** ****
Bang	Hyoseyamus reticulatus, L	Species of henbane.	Hindubágh hills.	Fodder for sheep and goats.
Bárak	*****	*****	Upper Zhob Sub- Division.	Fodder for sheep, goats and came is.
Barara	Periploca aphyl-	****	All hills	Used for fuel.
Barau	Sarghum hale- pense, Pers.	*****	Upper Zhob Sub- Division.	Fodder for sheep, goats and camels.
Barwasae (or Surwus).	Heteropogon Contortus.	The spear grass.	Do	Fodder for sheep, goats and camels, also used for roofing huts.
Bátsa		*****	Murgha hills in Hindubágh.	Folder for sheep and goats and also used as a medicine for indiges- tion and toothache.
Bér	Zizyphus jujuba.	The Indian	Fort Sandeman	100******
Bushka or Buska,	Lepidium draba,	jujube.	Wheat and bar- ley fields.	Used as a vegetable.
Chalghoza (Chilghoza) or Zanghoza.)		Edible pine.	Speraghar, Shin- ghar and Bulai- mán range.	The fruit is caten.

Pashtú name.	Scientific name.	Description or English name where known.	Locality where found.	Brief remarks as to local uses.
Dátúra	Datura fastuosa, Linn.	The black Datura.	Common	Poisonous drug.
Díl	Andropogon	A grass	Zhob river	Fodder for horses; also used for roofing huts.
Drab or Spar- maghar.	Eragrostis cyno- suroides.	Do	Common	Fodder for horses, cattle, sheep and goats.
Gandérae	Nerium odorum	Sweet scent- ed oleander.	Fort Sandeman.	Poisonous bush.
Gangu	Othonnopsis intermedia, Boiss.		Common	Infusion of the leaves us- ed as a bath for child- ren affected by heat, Twigs used as fuel.
Gwargurah or Gargol.	Reptonia buxi- folia.		Kaisaghar	The fruit is eaten.
Ghalmae		,Wild bush	Kila Saifulla and Fort San- deman.	
Gharawa n g or kárwái kushki.		Do	Do	Fodder for sheep and goats.
Chaz	Tamarix orien talis.	- Tamarisk	In the bed of the Zhob, Rod Fakirzai and Kandil rivers.	making wattle.
Ghozéra	Sophora Griffi thii.	Wild bush	Common	Fuel.
Gora,		A grass	. Do	Fodder for sheep and goats; also used as fuel.
Hinja or Raghband.		. Asafœtida	Zhazhbázha hills.	Condiment and drug.
Injáora	Allium sphaero cephalum.	Wild garlic.	Found through out the District.	
Insar	. Ficus carica	. Fig	Gardens; also wild.	••• ••••••
Jaoz	. Juglans regia	. Walnut	Garden at Shinghar,	***********

			· · · · · · · · · · · · · · · · · · ·	
Pashtú name.	Scientific name.	Description of English name where known	Locality where	Brief remarks as to local uses.
Khamazúrae (or makha- zúrae).	Withania co- agulans,	The cheese- maker or Indian ren- net.	and Fort San-	Seed used for making choses.
Kharbútae	******	A grass	Hindubágh	Fodder for sheep, goats, and cattle.
Khátol	Malcolmia Afri- cana.	••••••	Common	Fodder for sheep and goats; also root caton raw by the people.
Khokhae	*****	Wild onion	Do	Used as a vegetable.
Khozbín rac	******	A grass	Do	Folder for sheep and goats. Leaves are also used as a famino food.
Kukarae	300 ***	Wild plant .	Upper Zhob Sub-Division.	Cooling drug.
Kumála	*****	Ю	Common in spring.	Fodder for sheep, goats, and horses.
Kundazarga .	Astragalus am- sacanthus,	Wild bush	Hindubágh	Fodder for sheep, goats, and cattle.
Léghúnae	Daphne oleoides Schrieb.	,	All hills	Poisonous wild bush.
Lukha	Typha angusti- folia.	Rush	Zhob river	848 118
Mákhai o r Zaria,	Caragana		All hills	Flowers eaten raw; branches used as fuel,
Malkhúzi or Malkhúzgi.	Glycyrrhiza glabra.	Liquorice	Hindubágh and Kila Saifulla .	Drug for cough.
Manra or Séb	Pyrus malus	Apple	Gardens	
Maraghúna	Citrullus colo- cynthis.	Colocynth	Соттоп	Fodder for sheep, goats and camels. Seeds used as a drug both for men and animals.
Marghokae		*** ***	Kila Saifulla	Fodder for sheep, goats and cattle. Flowers, fruit, and roots eaten by the people.
	1			

Pashtu name,		Scientific name.	Description or English name where known.	Locality where found.	Brief remarks as to local uses.
Mashkanri .	-		A grass	Common	Fodder for sheep, goats, and cattle.
Maurai .	•	Zizyphora clino- podioides.	A plant	All hills	Used as a drug for typhus fever.
Murgha .	-	Poa bulbosa, Linn.	A grass	Common	Fodder for sheep, goats, horses, and cattle.
Naghura .	•	*****	Wild plant .	All hills	Roots used as a famine food.
Nal	"	Phragmites communis.	Reed	All over the District.	Fodder for sheep, goats, and horses, etc. Also used for roofing huts.
Nashtar		Pinus excelsa	Pine	Kaisaghar and Shinghar hills in Fort Sande- man.	Good timber,
Páh	••	*****	A grass	Kila Saifulla and Hindubágh.	Fodder for sheep, goats, and horses.
Palosa	•••	Acacia modesta	•••••	Dahána Chúhar Khél, and Fort Sandeman.	Timber, good, Gum also used,
Pamangi	•••	Bouce rosia	,	Fort Sandeman	Used as vegetable.
Pápůka	•••		Wild plant.	In wheat and barley fields.	Fodder for sheep, goats, and cattle; roots caten by the poor.
Parwatki	•••	Cocculus Lemb D, C,	Do	. Upper Zhob Sub-Division.	Fodder for sheep, goats, cattle, and horses; routs and leaves eaten by the poor.
Pastawana	•••	Grewia opposi tifolia,		Common	Fuel.
Pushai o aryae.	r	Rheum emodi	Rhubarb	. All hills in the District.	The plant is eaten by the people and con- sidered cooling.
Raghbolao	•••	Peucedanum sp	A wild plan	All hills	A famine food,
Rakhpatti	•••	Panicam colo- num.	A grass	Do	Do.
Sába	•••	•••••	Do.	Common	Fodder for all animals.
		10.15	1	1 4 5	

Pashtú name.	Scientific name.	Description English name. where know	Locality where found	Brief remarks as to local uses.
Sákanrgi .	Aplum grave olens, L.	- A grass	Sub-Division	
Sandae .	Tulipa stellats	. Wild tulip,	. Common ,	Fodder for sheep goats, and camels. The bulbs are eaten by the na- tives,
Sandréza o sandrázhat		A wild plan	t Do, .	Fodder for sheep, goats, and camels. The bulbs are eaten by the natives and also by the poor.
Sanzalai	Elæagnus hor- tensis,	Trebizond date or Bohe mian olive		Fruit eaten dry; good timber.
Sargarae	Cymbopogon iwarancusa.	Λ grass	All hills	Fodder for horses, cattle, sheep, and goats.
Sargae		Do	Kila Saifulla	Fodder for sheep, goats, and cattle.
Sarwanga		A wild bush,	Do. ,,	Fodder for sheep and goats.
Sasse	301.111	Do	Upper Zhob Sub-Division.	Fodder for sheep, goats, and cattle; also used as fuel.
Bhaftálu .	Prunus persica	Peach	Gardens	*********
Shang	Fraxinus xan- thoxyloides.	Ash	All hills	Fuel.
· Sharivi	Atraphazis spinosa.	*****	Zhob Sub- Division.	Fodder for sheep, goats, and camels. The sap of this tree is called Shirkhisht.
Shézi or Shez- gi.	Eromurus au- cheriana.	A wild plant.	All hills	Used as a vegetable.
Shinshobse	Mentha sylves- tris.	Peppermint	Common	Fodder for sheep, goats, donkeys, and camels.
Shkarae	**4 ***	A grass	Do	Fodder for cattle, sheep, goats, horses, etc.
Shkampára or Sangpara.	Plantago ovata.	A wild herb.	All hills	Seedwused as a medicine for dysentery.

Pashtú name.	Scientific name,	Description or English name where known,	Locality where found.	Brief remarks as to local uses.
Shorae	Haloxylon Griffithii, Bunge.	Barilla plant.	Common	Fodder for camels cattle, sheep, and goats; used as fuel; also for curing skins.
Showan	Olea cuspidata	Wild olive	•••••	Fruit (Shanani) is eaten by the people. Fuel.
Skharyae	Crambe cordi- folia.		Hindubágh	The root is used as medi- cine.
Spalmai	Calotropis gi-		Kila Saifulla and Fort Sande-	909 .gq
Spanda	Peganum Har- mala.	*****	man Common	Seed used as a drug.
Sparawanac		Wild tree	Hindubágh hills.	Leaves used for dyeing cloth and wool.
Spina	Populus cuphra- tica.	Poplar	Kila Saifulla and Fort Sandeman.	100 000
Spingulae		A grass	Upper Zhob	Fodder for sheep, goats and cattle,
Stagh ghuta or Stagh nár, Ush Ghutai oi Ush-nár and Wáh ghutai o Wáh-nár,	,	Species of asafostida.	All hills	Stems roasted and eaten.
Surae	Rosa lacerans	Wild bush	Do	***
Surghashae.	Saccharum	. A grass	Do	Fodder for cattle, sheep, etc.
Tirkha .	Artemisia	. A wild bush	Upper Zhob, especially Khurásán.	Fodder for sneep, goats and donkeys; also used as fuel.
Tor aghzae .		A grass	Upper Zhob Sub-Division.	Fodder for sheep and goats.
Tamand .		A wild plant	Do	Fodder for sheep, goats, and camels; also used in lieu of soap.

				T
Pashtú name.	Scientific name.	Description or English name where known.	Locality where found.	Brief remarks as to local uses,
Tút	Morus	Mulberry	Gardens	The principal varieties are that tút, sháh tút, tor tút and spín dánadár tút.
Ubashta	Juniperus ex- celsa.	Juniper	Súrghund hill	Timber and fuel.
Uma	Ephedra pachy- clada.	A wild bush.	All hills	The twigs are used for tanning water skins; also as a fuel. The ashes are mixed with tobacco for chewing.
Urgalami	Rhazya stricta, Dene.	••••••	Fort Sandeman.	Cooling drink prepared from the leaves.
Ushaghrae	***	A species of camel- thorn.	All bills	Fodder for sheep and camels.
Uzhgae	*** ***	A wild tree.	Kila Saifulla and Fort San- deman hills.	Fruit caten by the people. Fuel.
Wa	Angelica glau- ca, Edgw.	A wild plant.	Kila Saifulla	Fodder for sheep and goats.
Wanakka ".	******	A species of rhubarb,	All hills	Fodder for sheep and goats.
Wanna or Shrawan.	Pistacia cabu- lica.	Pistachio	All hills	Fruit much prized by the people; excellent fuel; two varieties are recognised, wanna and khar wanna (fruit- less).
Wazi	*******	A grass	Kila Saifulla	Eaten raw by the Ká- kars.
Washta	Stipa pennata, L.	Do,	Common	Fodder for cattle, sheep, goats and horses.
Wizha	******	Do	Do	Do.
Wulla	Salix acmo- phylla.	Willow	Do	Timber and fuel,
Zagha	Dalbergia Sis- soc.	The Sissu	Fort Sandeman.	Do.

Pashta name.	Scientific name.	Description or English name where known.	Locality where found.	Briof remarks as to local uses.
Zardálu	Prunus arme- niaca.	Apricot	In gardens in the District.	The principal varieties are sur baghali and spin.
Zarga ,	Prunus eburnea	Small wild almond.	All hills	Fruit is eaten; the gum is also used.
Zawał ".	Achillea Santo- lina, Stocks,	Agrass ,,.	Common	A cooling drink is pre- pared from the flowers; fodder for sheep and goats.
Zira	Cuminum cymi- num.	Cumin	All hills, especi- ally Spinghar range.	Condiment.
Zmai or spina zmai.	Suseda frati- cesa, Forsk.	*****	Kila Saifulla	Used in Neu of scap; also for making crude potash.
Zoe	Alhagi camelo- rum.	Camelthorn.	Common	Fodder for camels.
Zralg or Korac.	Berberis vul- garis.	True Bar- berry.	All hills	Roots boiled in water and used for tanning skins. Decoction also given to human beings and cattle in cases of internal injuries.
Zúpa or rúfa,	Hyssopus offici- nalis.	Нуввор	In hills in Hin- dubágh.	A drug.

Appendix III.

GENEALOGICAL TREE OF THE KAKAR TRIBE.

(See in pocket at back of book.)

Appendix IV.

Alphabetical List of Agricultural Implements.

Term in Pashtú,					Explanation,
Ara	•••	•••	•••	•••	A small sickle.
		Tráng or <u>T</u> sa			Four-pronged fork for winnowing.
Chilom	b a	•••	•••	•••	A sling generally used for driving birds away from crops.
Chugh	al	•••	•••	•••	A sieve with larger holes than the ordinary sieve called raghbél.
Dal	•••	•••	•••	•••	Wooden spade worked by two men with a rope for making small embankments.
Do-shá ghás		wakhul	gi or	Dwa-	A two-pronged fork.
Drapae	or Tra	apae	•••		A wooden spade for winnowing grain.
Ghasha	e or G	hasae	•••	•••	The shaft of the plough.
Hal, Y	ivgi or	Yivi	•••	•••	Plough.
Kahai	•••	•••	•••	•••	A hoe.
Karáh	or Yán	n	•••	•••	A spade.
Khál o	r Ghod	al	•••	•••	A plank harrow.
Kunda	h or Ra	ahanra	•••	•••	Shoe of the plough.
Laké (Hindu	bágh)	•••	•••	Plough handle. Also called niwa, mutanak, and muthai.
Lor	•••	, ,,,	•••	***	Sickle.

	Term :	n Pashte	ú.		Explanation.
Lutmar (Fort Sandeman)					A small wooden mallet used as a clod crusher.
Mála	•••	•••	•••	٠	A wooden log used as a clod crusher.
Nálai	•••	•••	•••		A drill.
Raghbél	•••	•••	•••		Sieve.
Rambae	•••	•••	•••	•••	A short spud.
Spára	•••	•••	•••		Ploughshare.
Tabar ,	•••	•••	•••		Axe.
Tsapanra	i	•••	•••		A wedge in the plough.
Zagh .	•••	•••	•••		A yoke.
Zaghwan	dai	•••	•••	•••	A wedge in the yoke.
				. 1	•

Appendix V.

Alphabetical list of principal agricultural, revenue and shepherd's terms used in the Zhob District:—

Term in Pashtú.	Explanation.
Adigar (Hindubágh)	Village artisan.
Adigari or Ahad Mahad (Fort Sandeman).	Wages in kind paid to an artisan.
Ajal (Mando Khéls)	A description of tenancy under which the tenant constructs a water channel and cultivates lands paying a share of produce as rent to the landlord.
Alor, Gangash (Kila Saifulla), or Paskhurda (Fort Sandeman).	The refuse of the fodder after it has been eaten by cattle.
Alwoi or Aloi	Half ripe corn. Also corn parched in fire.
Ambár	Granary; also manure.
Ambárchi or Ambár <u>ts</u> ae	A servant engaged to watch the ambar or granaries.
Andám Kawal (Hindubágh), Warna Kawal (Kila Saifulla).	The irrigation of hill side fields by means of a series of small openings in a water channel.
Asówán or Séwán	Miller.
Ashar or Hashar	Borrowed labour for agricultural purposes.
Asharbánrae or Himmatgarrae (Kila Saifulla).	Labourers obtained under the ashar system.
Awára	Tracts into which village lands are divided for periodical cultivation.

Term in Pashtú.	Explanation.
Azgharoi	A crop watcher.
Bachak, Bachkae, Tankae, or Narae (Mando Khéls).	The second crop of maize which does not ripen.
Bádár	Land owner (as distinguished from bazgar).
Bádmála (Hindubágh), Puchkai (Fort Sandeman), or Suka (Kila Saifulla).	
Badríza	Leather-covered rope with which the lower part of the apertures in the yoke is secured.
Bágh	Garden.
Baghali (Hindubágh)	A side channel to lead off water from a káréz which has been blocked.
Bághcha	Small garden.
Bah (Kila Saifulla)	Channel taken from a hill torrent for flood irrigation.
Bahál (Kila Saifulla), Sharíkat (Hindubágh).	A custom by which a man sinks a new káréz in another man's land on condition of getting a share, generally half, in the proprietorship both of land and water, the proprietor of the land keeping the other half.
Band	An embanked field.
Bandobast	Settlement.
Bára, or Khandar (Kibzais)	Stone embankments or walls made to protect fields from encroach- ment by hill torrents.

Term in Pashtú,	Explanation.
Barázar or Gharmanai (Hindu- bágh).	To bring home sheep and goats in the morning to be milked.
Bashakál	Rainy season.
Bédah or Gadai (Fort Sandemau)	Bundles of millet stalks.
Bégár (Hindubágh)	Forced labour.
Bobazh or Tandai	Crops sown late.
Bogarae or Kanrae (Fort Sandeman).	A piece of land given to a tenant or mullá free of rent for cultivation.
Bohál	Rent paid in kind by a tenant to landlord.
Bohalla or Wárza (Kila Saifulla)	Short showers of rain during spring.
Bútbána or Bútbah	A labourer engaged to cut and bring fuel.
Chalérae (Shíránis), or Tilerae.	A small plot of level ground among hills with a spring of water. In Hindubágh it means a village official appointed by the villagers to superintend the division of water.
Chao, Roina or Súp (Hindubágh)	Open water channel.
Chao káréz	Open channel in the middle of a kúréz.
Chár or Chér	Cleaning water channels in spring.
Charai or Joa	Trench between ridges in a melon field.
Charkhulae, Posakao (Kila Sai- fulla), Tsakholae (Hindubágh) or Tulai (Fort Sandeman).	Maize flowers.

Term in Pashtů.	Explanation.
China or Chishma	A spring.
Chinjan or Chimjan	Affected by chinjai insects. Thus chinjan khatakas, a melon affected by insects.
Dad or Karak (Fort Sandeman)	Wheat or barley when knots have appeared in the stalks.
Dagar or Att (Hindubágh)	Hard soil with which stones are mixed, unfit for cultivation.
Dam or Mat	Water running slowly owing to a block in a káréz.
Dána bandi or Tashkhís	Appraisement of crop for fixing Government demand in kind, used especially for grain crops.
Dandar, Bochar or Mutkarae (Hindubágh), Kakarae (Kila Saifulla), Mandakae (Fort Sandeman).	has been extracted.
Dangarra or Langa Mzakka (Hindubágh).	Field from which crop has been harvested.
Darbalai	Tripod used for churning milk.
Darwazh	A cut made by flockowners in kids' ears to serve as a distinguishing mark. Also a sheep or goat set apart for sacrifice at a shrine.
Doa halíza	Second ploughing.
Dobae or Dobgarrae	The rabi or spring crop.
Draman or Durman, Dalai (Ford Sandeman).	A heap of threshed crop before grain is separated.
Drémandae (Fort Sandeman)	Third watering of wheat field.

Term in Pashtů,	Explanation.
Dudh, Mukh-putti, Sarputti, Tand or Arghund (Kila Sai- fulla).	Wheat or barley the ears of which have formed but in which the corn is not visible.
Dukál, Dukali or Kákhti	Drought; also famine.
Durashta or Kutar (Hindubágh)	Chopped grass or lucerne mixed with chaff (bhúsa).
Dárawal, Lawastal, Pákawal, or Galánra (Hindubágh).	To winnow.
Durba or Warzabh (Kila Saifulla)	Rainy days in winter.
Durmand or Durmandán	Threshing floor; also a heap of crop for threshing.
Galai (Kila Saifulla), or Lambúr (Hindubúgh.)	Tunnel connecting wells of a káréz.
Gandál (Fort Sandeman)	Sweepings, in which grain is mixed, given to person who sweeps the threshing floor. Among Kibsuis it means sung chaff
Garlachae (Fort Sandeman)	A dam made of brushwood in a stream to lead off water.
Gazára	Chaff.
Gédai (Hindubágh)	Hulf-ripe corn; also bunches of ears of corn.
Génálae (Fort Sandeman)	Green maize and juari crop cut for fodder.
Gham or Mahsúl	Government revenue demand.
Ghamwal mzakka (Fort Sandeman).	Revenue paying land.
Gharak	A skin used for churning milk.

° Term in Pashtu.	Explanation.
Ghichae (Hindubágh)	Sods of turf.
Ghíndai, Ghúndae or Gonda	A bullock sack.
Ghoba or Ghobána	Cowherd.
Ghobal	To thresh.
Ghoimand (Fort Sandeman)	Second ploughing of field prepared for rice cultivation.
Ghojil	Place in a house or tent set apart for bullocks.
Ghozah (Hindubágh)	Ear of maize.
Ghutai	Buds.
Ghwa	Cow.
Ghwayae	Bullock.
Ghwazhae (Fort Saudeman) or Panérae (Hindubágh).	Seedlings.
Gol Mazhwae (Kila Saifulla)	The pole in the centre of the thresh- ing floor around which bullocks revolve.
Graut (Hindubágh)	A handful of cut crop.
Gul	The state of a crop when flowers have appeared.
Gul Bar (Kila Saifulla)	A single plucking of páléz produce.
Gul gíri kawal (Hindubágh)	Picking of superfluous flowers from melon plants.
Gumána or Kurkae (Hindubágh)	The head or a trial well of a káréz.
Gurdám or Sursút (Hindubágh).	Supplies collected for Government officials.

Term in Pashtú.	Explanation.
9	
Haud, Hauz, Taláo, or Wánga (Fort Sandeman)	A tank in which káréz water is collected.
Haudakae	Smaller tank.
Héra	A plot larger than a kurd.
Ijára	Lump assessment.
Jambast (Hindubágh)	Fixed cash assessment.
Jaríb (Hindubágh) or Kachána (Kila Saifulla).	Survey.
Jongae	A camel calf.
Jora or Yawa yivgi	A plot of land which can be ploughed by a pair of oxen in a day, also a pair of plough oxen.
Jowaki	Melon or vine cultivation in trenches.
Jurang, Ták, Wal (Fort Sandeman).	Melon plants; any creeping plant.
Jwál	A sack.
Kadhal or <u>Ts</u> aráh	A structure built of stones in mud for storing grain.
Káhdána, Kutsa (Hindubágh) Kadhána (Fort Sandeman).	An earthen structure for storing bhusa; (also a pit covered over with earth in which bhusa is stored).
Káhkasha, Korae (Hindubágh) Sawada (Kila Saifulla), Tran- ghar (Fort Sandeman).	A net for carrying bhúsa, etc.
Kanar (Fort Sandeman) or She (Mando Khéls).	A large bullook sack.

° Term in Pashtú.	Explanation.
Kandak, Park or Parrai (Fort	A flock of sheep.
Kankút or Kanta	Crop cut for making crop experiments.
Kaoda	A bundle of crop cut.
Kara or Táki (Hindubágh)	Sowing melons by hand in a line made with the plough.
Karaba, Krak or Tándúna (Fort Sandeman).	Maize or juúri stalks.
Karáwá (Fort Sandeman), Nokar (Kila Saifulla), or Mushriff (Hindubágh).	An official care-taker for crops.
Káréz	Underground water channel.
Karhanra or Kisht	Cultivation.
Kárígar or Kharlachae (Shíránis)	An artisan, especially a káréz digger.
Karnar (Mando Khéls)	A small pen in which kids are kept.
Karwanda	Cultivable land lying fallow.
Kashae or Bazgar (Sanatias)	Tenant (as distinguished from $b\acute{a}d\acute{a}r$).
Kats or Atal (Mando Khéls)	A plot of cultivable land in the bed of a stream.
Khákbél or Kháwri Warkawal.	Patting dry earth over the roots of the melon plants.
Khángtae or Shékhle (Hindu- bágh), Zazhai (Fort Sande- man).	Offshoots of a tree.
Khara (Kila Saifulla)	A dam made in a hill torrent to lead off water.

Term in Pashtú,	Explanation.
Kharkhul	A pair of shears.
Khid, Khashil or Mushk	Green wheat or barley cut for fodder.
Khula Band, Sarposh or Khula Sarposh, <u>Ts</u> ahán (Hindubágh).	Wells of a kárćz the tops of which are covered.
Khwa Pákawal (.Kila Saifulla).	To clear land of shrubs, etc.
Khwara	Fixed contribution paid to a mullá, suiad or shrine.
Kohlai	Earthen receptacle for storing grain.
Kur (Kila Saifulla), or Náwa (Hindubágh).	First watering before land is ploughed. In Fort Sandeman kur means to clear land of shrubs, etc.
Kuram or Pandi oba (Kile Saifulla).	Stagnant water.
Kurat Kánri or Spín Kánr Mzakka.	A kind of soft soil in which white stones are mixed.
Kurd, Kurdae or Kalae (Mando Khéls).	Small bed or plot in a field,
Kurund (Hindubagh)	Short lucerne plants grazed by cattle.
Kwarra, Kurai or Kwatta (Hindubagh and Kila Saifulla)	Small heaps of grain made at the time of batai.
Lagh Kawal (Hindubágh)	Plucking the superfluous leaves of vines.
Lahr	A hill-torrent carrying flood water.
Lai Kashi (Hindubágh)	Cleaning of kárés.

Term in Pashtú.	Explanation.
Lalún or Lalúnae Kawal	. Weeding.
Lao	. Harvesting.
Lásh	Melon field or orchard from which all fruit has been picked.
Lashta, Qalam (Hindubágh) o Táng (Fort Sandeman).	r Cuttings.
Lashtae	. A small irrigation channel.
Lath Band (Kila Saifulla)	The man who first constructs the ombankment round a field, and thus acquires a right of occupancy.
Lawae, Laugar or Laugarae	. Reaper.
Lawai	Wages paid to the reapers.
Lékha (Hindubágh)	A fixed rent, in kind or cash, paid by the tenant to the landlord.
Lérba or Larba	A shepherd who tends young kids.
Loaghai (Hindubágh)	. An earthen pot for milking.
Loazhaghae	Wages consisting of food, a quantity of wool and cash, given to a shepherd during the seuson when sheop and goats are dry.
Lora or Rod	A perennial stream of water.
Lowara Zawara (Kila Saifulla) Laman (Fort Sandeman) Adám or Andám (Hindubágh)	,
Lwagh or Lwasal	To milk,
Lwaghzi or Lwaghzungi	A milch sheep or goat given on loan.

Term in Pashtú.	Explanation.
Mán or Mápi	Revenue-free holding.
Malav-i-bágh or Angúribágh	Vineyard.
Mál dágh	Cattle tax.
Mématta or Máhmatta	A field close to a village enclosed in walls.
Manac or Mangarrae	Kharif or autumn harvest.
Mandak (Hindubágh)	Young melons.
Mandaka or Hadúkae (Sanatias).	Apricot stones.
Margharan (Hindubágh)	Withered (fruit).
Máta or Halíza (Fort Sandeman).	Land ploughed after harvest.
Mattana, or Khole mzakka (Fort Sandeman).	Soil which contains silt or mat.
Maya (Fort Sandeman and Kila Saifulla).	A flock of sheep and goats.
Mazh	Ram.
Ména or Mélanr	Encampment of nomads.
Mézha	Sheep.
Mián Khar <u>ts</u> or Sarkoi	A portion of grain set aside out of the main heap for the wages of artisans and village expenses.
Mírão or Chalérae	A village official appointed by the villagers to superintend the division of water and the maintenance of water channels.
Mírás or Mírási mzakka	Ancestral land.

Term in Pashtú.	Explanation,
Mora (Hindubágh)	Bundle of dry lucerne.
Mulk	Property in land.
Murzahiza (Fort Sandeman)	Cattle, sheep or goats which have calved or lambed for the first time.
Muz, Muzd or Shágirdána (Sanatias).	Wages, especially wages paid for grinding corn.
Nágha	Second sowings in a melon field to replace seed that has failed. Also seed that has failed.
Nálai	A drill. Drilling.
Nár or Nárgora mzakka (Hindubágh).	Land cleared of its crop. In Fort Sandeman nár means the shaft of the plough.
Nárai or Sunda (Fort Sandeman).	Wheat or barley stubble.
Nazún (Fort Sandeman)	Transplanting rice seedlings.
Nihál	Young trees.
Nihál khána	Nursery.
Núz, Sél or Séláo (Hindubágh)	A flood.
Obo khwar	The place for watering flocks.
Ola	A flock of kids.
Paiwand	Grafting.
Pakha mzakka (Kila Saifulla), Tora mzakka (Hindubágh) or Tore kháwari (Fort Sande- man).	ì

Term in Pashtú.	Explanation.
Páléz	Generic term for cucurbitaceous crops. Also the beds in which they are cultivated.
Pálézwán or Pálézkár	A cultivator of cucurbitaceous crops.
Parghúna, Tukhm lawastal or páshal.	Sowing seed broadcast.
Paro	Cash wages paid to shepherd.
Pas bát, Séka (Hindubágh) or Tis wánra (Fort Sandeman).	Chaff scattered on the threshing floor apart from the main heap.
Páshaki	Sowing melons broadcast among other crops.
Pasta mzakka or Potae (Hindu- bágh).	Soft soil.
Patai, Hatsk, Takhta or Tanrai (Hindubágh).	A holding, a plot.
Patwárae	Village accountant.
Péchak or Péchalae	Vine tendril; also a creeper that grows over vines.
Píka or Pok (Fort Sandeman).	Mung chaff.
Potlana mzakka (Fort Sandeman).	Flood irrigation.
Prépanra or Doawa (Hindu- bagh).	Second watering of field.
Pror	Chopped straw (bhúsa).
Puch khurda, Gada, Tumani, Ulsi, or Shariki mzakka.	Village or common land.

o Term in Pashtú.	Explanation.
Pakai or Tarnak (Hindubágh).	Unripe fruit, especially apricots.
Púla, Lath (Sanatias) or Kul (Kila Saifulla).	Embankment.
Puli spára or Gárwár	Wheat or barley crop in which some of the ears have appeared.
Punga or Náwar	A hollow or pit in which drinking- water is stored. Punga also means buds of vines.
Push or Ustákár (Hindubágh)	Blacksmith.
Pushta (Kila Saifulla)	Ground between two channels in melon fields.
Rágha	Stony land along the skirts of hill.
Rakhsat (Fort Sandeman)	Fourth watering of the wheat field.
Rama	A flock of sheep, as distinguished from tawae, a flock of goats.
Ramawal	To take out sheep to graze.
Régai, régana or atana mzakka (Kila Saifulla).	Sandy soil.
Riása	Grain heap on the threshing floor.
Rozmána	Lambing season.
Sagana mzakka, Shagai or Saga (Hindubágh), Sagwasta o Sagbasta mzakka (Fort Sande man).	r
Sama, Kharkáwa (Sanatias) o Luta kashal.	First watering of a crop.

Term in Pashtú.	Explanation.
Samsor or Súp	Crop of wheat or barley in which all the ears of corn have appeared.
Sangchin	Lining a water channel with stones.
Sarband or Nazokra (Mando Khéls).	Seeds which do not germinate.
Sarchák (Hindubágh)	Open channel in the middle of a káréz.
Sargala (Hindubágh)	Term formerly used for cattle tax by Afghán officials.
Sarkáo (Hindubágh)	Cutting wheat or barley to strengthen the plants.
Sarkása, Khwája-Khidarkása (Shíránis and Mando Khéls) or Jár Karúnae (Hindubágh).	
Sarrah	Manure.
Sarsáya	A quantity of grain given annually by each family to the village mullá.
Sarsúba	The well in a káréz next to the gumána.
Sartsúke (Fort Sandeman)	Rice crop in which grain is formed in some of the ears.
Sawára ták	Vines on wooden poles or trees as distinguished from jowaki or vines grown in trenches.
Shal (Hindubágh and Fort Sandeman).	Water-divide.
Sharana mzakka or Shara mágh (Kila Saifulla).	Salt land.
Shéla or Lah	A small hill torrent.

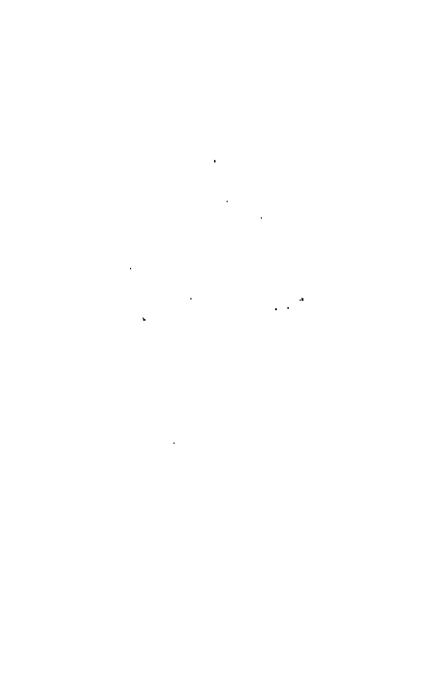
Term in Pashtú.	Explanation.
Shilam	Remuneration paid to village head- man for collecting Government demand, usually 5 per cent.
Shinkae	Unripe melon.
Shira (Hindubágh and Fort Sandeman).	Half formed grain.
Shkarae (Fort Sandeman)	Ear of mung crops.
Shom or Woi (Kila Saifulla)	First ploughing after harvest.
Shpalghalae, Shpol, Kér or Alang (Kila Saifulla).	Sheep or goat pen.
Shpána	Shepherd.
Shpazar (Fort Sandeman and Kila Saifulla).	To take flocks to graze in the night.
Shpazham or Batái	(Lit. one-sixth) Division of crops.
Skhundar	A calf.
Skwal	Shearing sheep and goats.
Skwalae	A shearer.
Spandakh or <u>Ts</u> ásha (Kila · Saifulla).	A bundle of spun wool thread.
Sparkhae, Gazára ghobal, Parghat (Sanatias), Surkhkoi (Hindubágh), Rasghobal (Mando Khéls).	Second threshing as distinguished from ghobal or first threshing.
Spína mzakka	Soft (white) soil.
Spíni sole (Fort Sandeman)	Unhusked white rice.
Spíni wríze (Fort Sandeman)	Husked rice.

Term in Pashtú.	Explanation.
Spín sarri mzakka (Hindubágh and Fort Sandeman.).	Land with moisture fit for sowing.
Sráe (Hindubágh)	A lucerne field.
Sre wrize (Fort Sandeman)	White soft rice.
Stébangi (Hindubágh)	Gleaning.
Sába (Hindubágh)	A káréz well.
Surkhae	Rust.
Súr ranz (Fort Sandeman)	A disease peculiar to rice crop due to drought.
Ták	The tendril of a vine; vine.
Tak (Hindubágh)	A mark made on sheep by cutting the wool or applying colour.
Tarnáwa, Náwa, Garga (Kila Saifulla), Béli (Fort Sande- man).	Wooden aqueduct.
Tauda, Sra, or Lalmi ghanam (Hindubagh).	Hot, i.e., late wheat.
Tawae	A flock of goats.
Téghúna (Fort Sandeman)	Rice crop newly sprouted: .
Télo	Weaning time.
Tikai or Chiwaka (Shíránis)	Young green wheat or barley crop clinging to the ground.
Tobra	A horse's nose-bag. A share of grain taken by horsemen from the zamín-dárs at the time of batái.
Tore sole (Fort Sandeman)	A variety of unhusked rice.

Term	in Posht	ú.		Explanation,
Tor ranz (Fo	rt Sand	eman)		A disease which renders rice-stalks black before the ears are formed.
Tsáh	•••	•••		Well
Tsakawal or '	'saka	•••	•••	To give fodder to sheep whilst at home.
Tsakhobae	***	•••	•••	Small plot of cultivated land on hill- side with a small quantity of per- manent water.
Tsapar	***	•••	•••	Weighted thorny hurdle used for threshing grain.
Tsarkhai	•••	•••	•••	Spindle for wool-spinning.
Tsáru or Soya	(Kila	Saifulla)	Lit. 2 spy. The first few plants which appear in a field.
Tsatae or Pa	nd (F	ort San	ıde-	A bundle of crop or a man's load given to an artisan or a mullú.
Tukhum	•••	•••	•••	Seed.
Urzha	***	•••	•••	A preparation made from the milk of a sheep or goat and cow, which has just given birth to its young.
Ush	•••	•••	•••	Camel (male).
Usha	•••	•••	•••	Camel (female).
Ushba or Ush	ıbána	•••	•••	Camel-herd.
Viála	•••	•••	•••	Water-channel.
Wachobi or K bágh).	hushká	wa (Hin	du-	Dry or rain cultivation.
Wad or Gad	(Fort	Sandema	n).	The commencement of harvest.

Term in Pashtú.	Explanation. °
Wáh	Main water-channel.
Wahri oba or Bahriza (Fort Sandeman).	Springs and kårêzes in which water appears after rain only.
Walma (Kila Saifulla)	Open ground where flocks are kept for the night.
Wám (Shíránis)	A plot of cultivable land.
Wand or Béla (Hindubágh)	An earthwork dam thrown across a stream,
Wandar, Tsangae or Chingi (Fort Sandeman).	A rope provided with nooses to which sheep and goats are tethered.
Wánra	Heap of chaff on threshing floor.
Warai	Sheep or camel wool.
Warg	A full-grown sheep, male or female. A bundle of wool shorn off a single sheep.
Warkh :	A small channel for irrigating small plots.
Warzal (Fort Sandeman)	Pruning of trees.
Washkae	A bunch of grapes ; also a rope.
Wazhae	Ear of corn.
Wazhi tsáe or Wazhi tsán (Hindubágh).	A gleaner.
Wurta or Kaloshta (Kila Saifulla).	Spun wool,
Wuz or Buz	Full-grown he-goat.
Wuza or Buza	Full-grown she-goat.

Term in Pashtú.	Explanation.
Wuzburrae	Goat hair cut from a single animal and made into a bundle.
Wazgháni	Goat hair.
Yakh band or Butak (Hindu- bágh).	Green wheat crop damaged by cold about the end of March.
Yivgi wahal or yivi wahal	Ploughing.
Zanri or Buji (Kila Saifulla)	Melon seed.
Zárae	Crop sown seasonably.
Zarkhída, Kháwandi, Nikata (Fort Sandeman) or Zarki (Hindubágh) mzakka.	Land acquired by purchase; also divided laud.
Zarzi	The yellowish ears of a crop when ripe.
Zendai, Avi, Bináwa, Baháo or Beháva (Hindubágh) Tándo- ba (Mando Khéls).	Irrigated land.
Zendai oba, Pakhe oba or Tore oba (Hindubágh).	Perennial water.
Zhaghzai or Kawasi	Wheat chaff.
Zhar ghwazhae :	Withered crop.
Ziam	Swampy ground.
Ziari solé (Fort Sandeman)	Yellowish unhusked rice.
Zranda	Water mill.
Zúka (Hindubágh and Fort Sandeman).	Any newly sprouting crop.
Zumbak or Zhérai (Hindubágh).	The soft hairs on the ears of maize.





ROYAL ASIATIC SOCIETY OF BENGAL LIBRARY

Title Baluchistan District

Gazetteers - A.VA.
Vol. T. Zhob Districtions
Class No. 910-3 Book No. B198A

Date of Issue Issued to Date